CONTEMPORARY *LILONG*:

DESIGN CONCEPTS FOR MIGRANT WORKER

COMMUNITY HOUSING IN SHANGHAI

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DEDICATION

To us, Emely—

to everything that we once were,

to all that we are today,

and to everything that we will one day be.

May we always shine together, My Love.

Te amo, Emely.

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ABSTRACT

The sustained economic growth in which China has thrived since rapidly transitioning to a capitalist market economy in 1978, has led China to significant urbanization and industrialization advancements. Economic and personal opportunities in major cities in China have motivated segments of the rural population to migrate into urban regions seeking improved livelihoods. The cheap and readily available labor of rural-urban migrant workers has been essential to the speedy development of China. The unprecedented expansion of the metropolitan regions has also led to the establishment of urban villages and migrant housing communities in cities, such as Shanghai and Beijing. Furthermore, when rural-urban migrants first move to the city, they have particular needs and priorities revolving around employment, networking, and housing. Historically, the unique Shanghainese *Shikumen Lilong* housing model has been able to meet several of the primary needs of rural-urban migrant workers.

Through an analysis utilizing secondary sources, this project aims to abstract and customize the *lilong* concept for the migrant worker population and their cultural traditions of networking in order to increase their likelihood of success in contemporary Shanghai. Additionally, this project puts forth a series of design concepts that can be strategically implemented in diverse manners to create community buildings with design concepts for building communities. This project will be instrumental to those who are interested in improving the housing conditions of migrant workers in Shanghai in a way that prioritizes and promotes the formation of social networks. It will also be of use to those who are invested in continuing the transformation of the *lilong* model. What this author offers is a way of abstract thinking and designing which can begin to resolve several of the social, historical, and architectural challenges faced by migrant workers, local governments, professionals, scholars, and local residents in Shanghai and abroad.

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CHAPTER 1

INTRODUCTION

What shikumen *represents is not a door, a room, a building or an alley, but the classical architecture of folk dwellings of Shanghai in its urban development.*[1]

1 Ruan Yisan et al., *Shanghai Shikumen* (Shanghai: Shanghai People's Fine Arts Publishing House, 2011), 4.

CHAPTER 1 | INTRODUCTION

1.1 INTRODUCTION

"Three keys"—that is what Dan needs to make his goals into a reality: a key to an office, a key to a car, and a key to a house.[2] He dreams of becoming rich and having a family of his own one day. Bellow lies the partial stories of two migrant laborers in Beijing as described by Sarah Swider in her recent book, *"Building China: Informal Work and the New Precariat*."[3]

With fingers calloused and caked in cement, Dan smokes his South Sea cigarette. He inhales deeply trying to enjoy his break before going back to work. At 19 years of age, he spends most of his day in the unrelenting sun with his back bent over as he swings a shovel mixing and moving cement. Dan is from Hebei Province—everyone smokes the same brand of cigarettes there: South Sea. He opted not to go to high school in his hometown to pursue his dreams. However, having just arrived in the city, Dan has little money saved so far and desperately needs a key to an office. As a typical construction worker in present-day urban China, Dan needs to become the boss or a contractor to get his office key. With an office key in hand, he will then be able to afford a home and a car—a motorcycle, at least—thus, securing the other two keys necessary to reach his goals. Dan will finally have something to offer his future wife and family.[4]

Next to Dan's squatting form, is Anlin. He also smokes South Sea cigarettes. Anlin is 50 years old. His hands are coarse, his arms scarred by accidents, his face and back are dark from the unforgiving sun, his body gaunt. Anlin's body is like a canvas of the grueling work and little food consumed for far too long. He has stopped returning to his hometown; his children grew up without him, and his wife no longer waits for him—she has moved on to a better man. All of this, while he fruitlessly chased his dreams year after year, away from his family but his defense, that is what circumstances required of him at the time to provide a better future for them. It seems that

2 Sarah Swider, *Building China: Informal Work and the New Precariat*, 1 edition (Ithaca: ILR Press, 2015), 2.
3 Swider, *Building China*.
4 Swider, 1–3.

similar to Anlin's desires from long times past, Dan also aspires to provide a prosperous future for his family.[5]

Both men continue smoking their cigarettes in silence—perhaps reflecting on the fascinating yet devastating workings of life. The different cigarette brands smoked next to them function like a map which illustrates the possible origins of workers. There is South Sea (*Zhongnanhai*) from Hebei; Jade Creek (*Yuxi*) and Red Tower (*Hongta Shan*) from Yunnan; Pride (*Jiaozi*) from Sichuan; Red Sand (*Baisha*) from Henan; Happy Cat (*Haomao*) from Shaanxi; and Double Happiness (*Shuangxi*) from Shanghai.[6] They represent a wide-range of hometowns, which speak of the migration patterns into Shanghai during the last few decades (Figure 1.1).[7]

Dan's dreams and his potential future suggested by the mere presence of Anlin next to him represent the harsh reality for most rural-urban migrant workers in contemporary Chinese tier-one cities such as Beijing, Chongqing, and Shanghai.[8] Succeeding in Shanghai is especially challenging for most rural-urban migrant workers because they have a rural-*hukou* status, versus an urban-*hukou* registration.[9] The *hukou* is a government system which has a long history influencing population management regarding residency and employment.[10] The *hukou* system operates as an internal passport-type of system linking welfare benefits and citizenship rights to birthplace and *hukou* status.[11] As such, the *hukou* system designates and separates the urban population from the rural population, along with the non-local from the local residents.[12] Additionally, it is a well-known fact that the *hukou* system grants the urban population a series of rights and a broad range of welfare benefits, which are consistently denied to the rural population.[13] The lack of rights and benefits also applies in the case of individuals who are born in

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5 Swider, 1–3.
6 Swider, *Building China*.
7 Ulrike Bronner and Clarissa Reikersdorfer, eds., *Urban Nomads Building Shanghai: Migrant Workers and the Construction Process* (Bielefeld: Transcript-Verlag, 2016).
8 Li Zhang, *Strangers in the City: Reconfigurations of Space, Power, and Social Networks Within China's Floating Population*, 1 edition (Stanford, Calif: Stanford University Press, 2001).
9 Fulong Wu, Fangzhu Zhang, and Chris Webster, eds., *Rural Migrants in Urban China: Enclaves and Transient Urbanism* (Florence: Routledge, 2015). For additional details on China's household registration (hukou) system, refer to: J. Young, China's Hukou System: Markets, Migrants and Institutional Change, 2013 edition (Basingstoke, Hampshire: Palgrave Macmillan, 2013); Li Zhang, Strangers in the City: Reconfigurations of Space, Power, and Social Networks Within China's Floating Population, 1 edition (Stanford, Calif: Stanford University Press, 2002); and Kam Wing Chan, "The Chinese Hukou System at 50," Eurasian Geography and Economics 50, no. 2 (March 1, 2009): 197–221
10 Wu, Zhang, and Webster.
11 Swider, *Building China*.
12 Peiyuan Qiu et al., "Rural-to-Urban Migration and Its Implication for New Cooperative Medical Scheme Coverage and Utilization in China," *BMC Public Health* 11 (2011): 520; Ran Liu, *Spatial Mobility of Migrant Workers in Beijing, China*, 2015 edition (Springer, 2015); J. Young, *China's Hukou System: Markets, Migrants and Institutional Change*, 2013 edition (Basingstoke, Hampshire: Palgrave Macmillan, 2013).
13 Swider, *Building China*; Orna Naftali, *Children in China*, 1 edition (Cambridge, UK: Polity, 2016); Young, *China's Hukou System*; Miao Li, *Citizenship Education and Migrant Youth in China: Pathways to the Urban Underclass* (New York: Routledge, 2015); David S. G. Goodman, *Class in Contemporary China*, 1 edition (Polity, 2014); Myra Pong, *Educating the Children of Migrant Workers in Beijing: Migration, Education, and Policy in Urban China*, 1 edition (Abingdon, Oxon ; New York, NY: Routledge, 2014); Choon-Piew Pow, *Gated Communities in China: Class, Privilege and the Moral Politics of the Good Life*, Reprint edition (London: Routledge, 2012); Minglu Chen and David S. G. Goodman, *Middle Class China: Identity and Behavior* (Cheltenham: Edward Elgar Pub, 2013); Wu, Zhang, and

urban regions from rural-*hukou*-status parents because the children's *hukou* is passed down from their parents and not from their location of birth exclusively. As such, a person can have been born and resided all of his or her life in an urban region, yet never be legally recognized as an urban resident.[14]

The rural-to-urban migrant worker population is also known as the "floating population."[15] The National Bureau of Statistics of China (NBSC) created the term, "floating population," to categorize and track the migrant population.[16] The NBSC defines the term as follows:

> "Floating population refers to the population who live in places other than their household registration excluding those with current residence different from the place of their household registration but still in the same city. Population who lives in places other than their household registration but still in the same city refer to those whose current residences are different from the registered towns or streets in the same district or in different districts but still in the same municipality or prefecture-level city."[17]

The floating population in China consisted of an estimated 253 million individuals in 2014,[18] and by the year 2017, it was estimated to consist of 287 million migrant workers (Figure1.2).[19] An increase of about 34 million people in only three years communicates that migrants continue to relocate to urban regions to pursue a lifestyle with greater opportunities. Furthermore, the 2017 migrant worker statistics suggest that more than one-third of China's total working population is made up of migrant workers.[20] In the case of Shanghai, the working population, which comprised of 25-40 percent of the total population, depending on the source, was made up of six to nine million migrants workers in 2017—all of which were affected daily by the socio-political and economic practices of Shanghai.[21]

Webster, *Rural Migrants in Urban China*; Jeffrey Becker, *Social Ties, Resources, and Migrant Labor Contention in Contemporary China: From Peasants to Protesters* (Lanham: Lexington Books, 2014); Zhongshan Yue, Shuzhuo Li, and Marcus W. Feldman, *Social Integration of Rural-Urban Migrants in China: Current Status, Determinants and Consequences* (WSPC, 2015); Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Holly H. Ming, *The Education of Migrant Children and China's Future: The Urban Left Behind* (Abingdon, Oxon: Routledge, 2013).

14 Li, *Citizenship Education and Migrant Youth in China*; Ming, *The Education of Migrant Children and China's Future*.

15 Zhang, *Strangers in the City*, 23. For additional details on China's floating population and differences in defining the term and group as well as differing data collection practices throughout China refer to: Fulong Wu, Fangzhu Zhang, and Chris Webster, eds., Rural Migrants in Urban China: Enclaves and Transient Urbanism, Reprint edition (Place of publication not identified: Routledge, 2015)., China Labour Bulletin, "Migrant Workers and Their Children," China Labour Bulletin, 2018, http://www.clb.org.hk/content/migrant-workers-and-their-children.

16 Zhang, *Strangers in the City*.

17 National Bureau of Statistics of China, "Statistical Communiqué of the People's Republic of China on the 2015 National Economic and Social Development," National Bureau of Statistics of China, February 29, 2016, http://www.stats.gov.cn/english/PressRelease/201602/t20160229_1324019.html.

18 National Bureau of Statistics of China, "Population at Year-End By Region-2017," China Statistical Yearbook 2017, 2017, http://www.stats.gov.cn/tjsj/ndsj/2017/indexeh.htm.

19 China Labour Bulletin, "Migrant Workers and Their Children."

20 China Labour Bulletin.

21 Swider, *Building China*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; National Bureau of Statistics of China, "Population at Year-End By Region," China Statistical Yearbook 2016, 2012, http://www.stats.gov.cn/tjsj/ndsj/2017/indexeh.htm; China Labour Bulletin, "Migrant Workers and Their Children."

In many ways, the migrant worker population has been the driving force behind the unprecedented economic success that China has experienced since 1978.[22] However, despite the crucial and historical significance of the migrant worker, most migrants are consistently marginalized, discriminated against, and treated like a second-class citizen in present-day urban China.[23] Traditionally, the migrant worker population consisted of unskilled, or partially-skilled men, who were even illiterate, at times.[24] Unfortunately, due to the complex limitations dictated by the *hukou* system and socio-economic policies, migrant workers and their children face many additional challenges while living in the city.[25] Some of the well-documented challenges faced by migrant families are the limited employment opportunities, a lack of health care coverage, unfavorable educational prospects for migrant children and teenagers, and substandard living conditions[26]—contrasting significantly with the legal protections and benefits awarded to urban-*hukou* holders.[27] As Li Zhang asserts, "migration is not just an individual effort but is often part of a family strategy for economic diversification."[28] To minimize the risks to the entire family, it is common practice, to only have the male head-of-households relocate to the city;[29] however, once the men are settled, their families join them—this was probably the plan for Anlin and his family.[30] Regrettably, this only illustrates the reality faced my many migrants and despite the challenges, thousands of people, like Dan and Anlin, continue to move to the city in search of a better future.[31]

The rural-to-urban migrant worker population is a vulnerable social group in Shanghai,[32] and most migrant workers tend to be paid the minimum wage because of their poor skills due to their limited education and also due to the "discrimination in the urban labor market" (Figure 1.3).[33] Other minimum wage workers in Shanghai include shop workers, production line workers, and construction workers (Figure 1.4).[34] Jobs in construction and other industries dominated by migrants tend to be "intense, dangerous, and harsh and are therefore not attractive to local urban residents,"[35] many of which are referred to as "3-D jobs: dirty, dangerous, and demanding."[36]

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22 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Zhang, *Strangers in the City*.
23 Li, *Citizenship Education and Migrant Youth in China*.
24 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.
25 Wu, Zhang, and Webster.
26 Li, *Citizenship Education and Migrant Youth in China*.
27 Zhang, *Strangers in the City*.
28 Zhang, 54.
29 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.
30 Li, *Citizenship Education and Migrant Youth in China*.
31 Liu, *Spatial Mobility of Migrant Workers in Beijing, China*.
32 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Zhang, *Strangers in the City*.
33 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*, 85.
34 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*.
35 Shi Li, “The Economic Situation of Rural Migrant Workers in China,” *China Perspectives* 2010, no. 2010/4 (December 15, 2010): 11, http://journals.openedition.org/chinaperspectives/5332.
36 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*, 86.

In spite of the fact that in 2017, Shanghai had the highest paid minimum wage rate (2,300 Yuan) (Figure 1.5),[37] rural-urban migrant workers living in Shanghai do not see this prosperity. The minimum wage, which is stipulated by the central government, is supposed to be at least 40 percent of the average local wage,[38] but in reality, local governments fix the rate to be between 20 to 35 percent of the average wage paid to a local urban-*hukou* worker.[39] Unfortunately, the income gained on a minimum wage barely begins to cover food, housing, and transportation costs, forcing workers to rely heavily on overtime, subsidies, and bonuses at work to make a living wage.[40] As such, affording a vehicle, as Dan wishes to accomplish one day, can be a challenging goal to meet for some minimum wage workers such as himself.

Migrant workers are not only vulnerable socially but they also face other cultural challenges as many go directly from rural regions of China into metropolitan regions such as Shanghai, Beijing and Guangzhou. The transition into the city can prove jarring for some people and as a result, some migrant workers have a difficult time surviving in the city and finding their sense of familiarity. Additionally, there are many dialects spoken throughout China and many migrants do not speak the local language in Shanghai; which makes it even more challenging to navigate the city. Furthermore, each region of China has particular mannerisms, culture, and traditions and the lack of awareness of these differences makes rural-to-urban migrant workers stand out significantly at times; especially when compared to local-*hukou* Shanghai residents. Other social groups in Shanghai can have more comfortable lives in the city because they have access to considerably more resources and they tend to have more money available to purchase the services they need instead of being forced to rely on neighbors as it is typical of migrant workers. They have vehicles and can travel with more easiness to work, to meet their needs and even to socialize. Their employers do not try to take advantage of them regularly and they are not stigmatized for being from a different part of China or because their skin is dark and leathery from too much exposure to the sun. Nor are they discriminated against for their lack of formal higher education or blamed blindly for crimes in Shanghai, and they are not avoided at all costs by some urban-*hukou* residents.[41]

Because of their linguistic and economic limitations, social networks are vital for migrant workers in China[42] and as Charles Tilly states, they "provide a setting for life at the destination, a

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37 China Labour Bulletin, “Labour Relations FAQ,” China Labour Bulletin, 2018, http://www.clb.org.hk/content/labour-relations-faq.
38 China Labour Bulletin.
39 China Labour Bulletin.
40 China Labour Bulletin, “Labour Relations FAQ,” China Labour Bulletin, 2018, http://www.clb.org.hk/content/labour-relations-faq.
41 Pow, *Gated Communities in China*.
42 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Zhang, *Strangers in the City*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Stefan Al, ed., *Villages in the City: A Guide to South China’s Informal Settlements*, Bilingual edition (Hong

basis for solidarity and mutual aid as well as division and conflict."[43] When people relocate to a new and unknown area, they tend to stay close together with other people from the same region as their own.[44] Newcomers do not tend to intermingle with local residents when they first arrive at the city[45] and the communities new residents tend to build are with individuals who have a common background: a common native language, traditions, culture, etc.[46]

When migrant workers arrive to Shanghai, most of them have three fundamental priorities: They must find stable employment, establish an active support group in the city, and secure a house for their families to join them. Through social networks, new rural-urban migrant workers can achieve these goals because family, friends, and business partners will help mentor and serve them as city guides. They will show the new urban resident where to find essential things such as food, clothing, and a bike or motorcycle-and they are additionally advised about the key people to know and avoid in the city and industry. Moreover, if need be, such as to start or expand a business, through social networks a migrant worker may also find the more affluent members of the community for a financial loan.

Historically, migrant workers have relied heavily on their social networks to establish themselves in the city[47] and traditional Chinese migrant social networks revolve around two cultural principles: blood and place bonds.[48] Blood bonds (*xueyuan*) refers to consanguinity or blood[49] and the philosophy of blood bonds, or kinship bonds, is fairly self-explanatory. Zhang (2001) explains that place bonds (*diyuan*), native-place networks, refers to "people's attachment to a specific place, which is often their own or their ancestor's place of birth."[50] The boundaries of kinship and native-place bonds are fluid and defined differently in the literature and by context;[51] however, both of these concepts, blood and place bonds, are inseparable in most traditional societies.[52] According to Fei (1985), these concepts are indivisible because "*diyuan* is no more than the extension of *xueyuan*...the idea of being born and dying in the same place fixes the relationship between people and places."[53] Nonetheless, the possibility of being born and dying in

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Kong : Honolulu: University of Hawaii Press, 2014); Pun Ngai, *Migrant Labor in China*, 1 edition (Cambridge, UK ; Malden, MA: Polity, 2016); Swider, *Building China*.

43 Virginia Yans-McLaughlin, ed., *Immigration Reconsidered: History, Sociology, and Politics* (New York: Oxford University Press, 1990), 90.

44 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*.

45 Geert Hofstede, *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd edition (Thousand Oaks, Calif.: SAGE Publications, Inc, 2003).

46 Zhang, *Strangers in the City*.

47 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Zhang, *Strangers in the City*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Al, *Villages in the City*; Ngai, *Migrant Labor in China*; Swider, *Building China*.

48 Zhang, *Strangers in the City*.

49 Zhang, 55.

50 Zhang, 55.

51 Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*.

52 Zhang, *Strangers in the City*.

53 Zhang, 55.

the same place has been challenged by the significant migration patterns into the city in recent decades.[54] Furthermore, it is common practice for migrant workers to move from one urban province to another—as if to test out which city can give them a greater financial return. According to a survey completed by 120 Wenzhou migrant-workers in Beijing, nearly 70 percent of them reported to have lived in at least one other province.[55] In another study, 80 percent of the migrant workers had resided in at least two or more cities before settling down in their current location.[56] As such, these statistical figures illustrate a certain form of migrant temporality in the city and they further establish that a certain percentage—less than 30 percent, depending on the study—of migrant workers move directly to a large city such as Beijing and Shanghai from their rural hometown. Overall, as Zhang (2001) argues, native-place and kinship communities are "crucial for migrants in choosing their destinations, acquiring initial capital, setting up a business, recruiting workers, sharing information, and learning business skills."[57]

According to Logan (1981), "migration is not a one-step, final process which forever separates them [migrants] from their rural homeland but rather a continual exchange between city and country."[58] A relationship of exchange is especially the case when considering the common labor recruitment practices of Chinese migrant entrepreneurs. Historically, a migrant would depart from his or her village with relatives or friends from the same hometown and the specific destination of the journey was often selected because a village member or relative had already set up an economic or social base there.[59] Through the practice of "*dai*," individuals with more migration experience would return to their town of origin and recruit direct family members, relatives, fellow villagers, and other people from the same township or county.[60] More importantly than merely taking others into the city, the philosophy of *dai* mandated that the experienced migrant agree to look after the newcomer in the city—a form of urban mentorship.[61] As Zhang (2001) states, "after a couple of years, when the junior members learned enough tailoring skills and had some business experience, they would set up their own independent businesses."[62] Taking family and relatives back to the city in hopes of helping them financially had practical and symbolic purposes.[63] On one hand, recruiting from one's village reduced the internal production

54 Li, *Citizenship Education and Migrant Youth in China*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Rachel Murphy, ed., *Labour Migration and Social Development in Contemporary China*, 1 edition (London ; New York: Routledge, 2008); Swider, *Building China*.
55 Zhang, *Strangers in the City*, 59.
56 Zhang, 60.
57 Zhang, 60.
58 Kathleen Logan, "Getting By With Less: Economic Strategies of Lower Income Households in Guadalajara," *Urban Anthropology* 10, no. 3 (1981): 231–46.
59 Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*.
60 Zhang, *Strangers in the City*, 60.
61 Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*.
62 Zhang, *Strangers in the City*, 60.
63 Liu, *Spatial Mobility of Migrant Workers in Beijing, China*.

costs and helped develop a stable, reliable, and hardworking labor force[64] while recruiting family and relatives, spoke of having "face" and kinship responsibility; a symbolical significance.[65] As a migrant with over ten years of experience recruiting people from his hometown explains:

> Nobody wants to have poor relatives! If I had a poor brother, I would try to give him some money to help him out. My wife might be very unhappy about my giving our money to relatives on my side of the family. The same situation would be true for my wife if she had a poor relative. So the best way is that every relative gets rich and then no one will come to beg for money from you. Our Wenzhou people stress family bonds and mutual responsibility. It is not good for a rich man to have poor relatives because people will laugh at you for being selfish and not willing to help out your own kin.[66]

However, the effects of networking are not always harmonious[67]and as Yu Chen and Gwilym Pryce (2014) explain, there are limitations to one's social network and the strength of the connection is "not the same across migrants of different socioeconomic status."[68] Despite this fact, it is important to note that people from different social, economic classes tend to have access to different resources.[69] However, just because the strength of the partnership is different, it does not necessarily mean that it is ineffective for some people and under certain circumstances. One could argue that research has repeatedly proven that, in a variety of scenarios, it is especially beneficial to build relationships and communities that transcend social boundaries.[70]

As stated earlier, through social networks, most migrants work to secure their three priorities when they first arrive to the city: a stable form of employment, a social network in the city, and an affordable housing unit for their family.[71] Dan wishes for the same three things in conjunction with a vehicle;[72] however, obtaining a house, is quite a challenge and most migrant workers cannot afford the purchase of a house in Shanghai.[73] Today, housing costs are generally

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64 Liu.
65 Zhang, *Strangers in the City*, 61.
66 Zhang, 61.
67 Zhang, *Strangers in the City*.
68 Wu, Zhang, and Webster, *Rural Migrants in Urban China*, 4.
69 Pow, *Gated Communities in China*; Jane Jacobs, *The Death and Life of Great American Cities*, Reissue edition (New York: Vintage, 1992).
70 Abraham H. Maslow, *Hierarchy of Needs: A Theory of Human Motivation* (www.all-about-psychology.com, 2011); Li, *Citizenship Education and Migrant Youth in China*; Goodman, *Class in Contemporary China*; Teresa P. R. Caldeira, *City of Walls: Crime, Segregation, and Citizenship in São Paulo* (Berkeley: University of California Press, 2001); Hsin-Huang Michael Hsiao, ed., *Chinese Middle Classes: Taiwan, Hong Kong, Macao, and China*, 1 edition (New York: Routledge, 2013); Swider, *Building China*; Erik Olin Wright, ed., *Approaches to Class Analysis*, Revised ed. edition (Cambridge, UK ; New York: Cambridge University Press, 2005); Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*.
71 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Zhang, *Strangers in the City*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Al, *Villages in the City*; Ngai, *Migrant Labor in China*; Swider, *Building China*.
72 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.
73 J. Doling and R. Ronald, eds., *Housing East Asia: Socioeconomic and Demographic Challenges*, 2014 edition (Palgrave Macmillan, 2014); Belinda Yuen and Anthony G. O. Yeh, *High-Rise Living in Asian Cities*, 2011 edition

very expensive in Shanghai, but especially so for low-paid rural-urban migrant workers since most migrants cannot afford a house in Shanghai.[74] Migrants tend to have a hard time affording the rising housing costs along with other living expenses, thus, leaving very little of their income free after deductions for basic things such as food, clothing, and remittances sent back to their home towns. Fulong Wu and Fangzhu Zhang (2014) assert that "formally built housing in the market is unaffordable to rural migrants, because the design of the land leasing system targets the highest bids for land and thus, the higher end of the housing market."[75] Without formally built housing as an option, the predominant housing alternative for migrants are urban villages.[76] Factory dormitories and prefabricated dormitories next to the building sites are also housing options for workers.[77] Thus, a high proportion of migrants prefer to save money on living expenses and opt to reside in affordable but extremely small spaces. However, as Bronner and Reikersdorfer (2016) report, there is a consensus in the literature—"the quality of housing is below common standard of acceptable housing and that many rural migrants are living in absolute poverty."[78]

Literally, "villages within the city" (*chengzhongcun*), are large residential enclaves in urban regions such as Shanghai, Beijing, and Guangzhou, and are wedged within the city (Figure 1.6).[79] Having previously been agricultural villages, these urban villages—in their own way—parallel the adjacent urbanized neighborhoods. The informal construction of urban villages is a result of rapid urbanization and does not adhere to present-day city planning regulations or building codes, and thus, they "developed through spontaneous construction to pursue the opportunities of rental markets due to rising demand for cheaper housing" (Figure 1.7).[80]

(Springer, 2011); Youqin Huang and Si-ming Li, eds., *Housing Inequality in Chinese Cities* (Abingdon, Oxon: Routledge, 2014); Ya Ping Wang and Alan Murie, *Housing Policy and Practice in China* (New York: St. Martin's Press, 1999); Ya Ping Wang, "Housing Reform and Its Impacts on the Urban Poor in China," *Housing Studies* 15, no. 6 (November 2000): 845–64, https://doi.org/10.1080/02673030020002573.

74 Doling and Ronald, *Housing East Asia*; Yuen and Yeh, *High-Rise Living in Asian Cities*; Huang and Li, *Housing Inequality in Chinese Cities*; Wang and Murie, *Housing Policy and Practice in China*; Wang, "Housing Reform and Its Impacts on the Urban Poor in China."

75 Wu, Zhang, and Webster, *Rural Migrants in Urban China*, 4.

76 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.

77 Swider, *Building China*.

78 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*, 92.

79 Al, *Villages in the City*, 1.

80 Wu, Zhang, and Webster, *Rural Migrants in Urban China*, 4. For more details on the phenomenon of urban villages refer to: Al, *Villages in the City*; Yuting Liu et al., "Urban Villages under China's Rapid Urbanization: Unregulated Assets and Transitional Neighbourhoods," *Habitat International* 34, no. 2 (April 1, 2010): 135–44, https://doi.org/10.1016/j.habitatint.2009.08.003; Siqi Zheng et al., "Urban Villages in China: A 2008 Survey of Migrant Settlements in Beijing," *Eurasian Geography and Economics* 50, no. 4 (July 1, 2009): 425–46, https://doi.org/10.2747/1539-7216.50.4.425; Ran Liu and Tai-Chee Wong, "Urban Village Redevelopment in Beijing: The State-Dominated Formalization of Informal Housing," *Cities* 72, no. Part A (February 1, 2018): 160–72, https://doi.org/10.1016/j.cities.2017.08.008; Yuting Liu and Fulong Wu, "Urban Poverty Neighbourhoods: Typology and Spatial Concentration under China's Market Transition, a Case Study of Nanjing," *Geoforum* 37, no. 4 (July 2006): 610–26, https://doi.org/10.1016/j.geoforum.2005.11.006; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Zhigang Li and Fulong Wu, "Residential Satisfaction in China's Informal Settlements: A Case Study of Beijing, Shanghai, and Guangzhou," *Urban Geography* 34, no. 7 (November 1, 2013): 923–49, https://doi.org/10.1080/02723638.2013.778694; Fulong Wu, Fangzhu Zhang, and Chris Webster, "Informality and the Development and Demolition of Urban Villages in the Chinese Peri-Urban Area," *Urban Studies* 50, no. 10 (August 1, 2013): 1919–34, https://doi.org/10.1177/0042098012466600; Huang and Li, *Housing Inequality in Chinese Cities*;

Unregulated by the city, farmers freely added level after level to their residences creating urban villages which are characterized by "high-rises so close to one another that they create dark claustrophobic alleys—jammed with dripping air-conditioning units, hanging clothes, caged balconies and bundles of buzzing electrical wires—crowned with a small strip of daylight, called by locals 'thin line sky.'"[81] Furthermore, some buildings are constructed so close together that they are called "kissing buildings" or "handshake houses" because one can literally shake hands with a neighbor from the adjacent building simply by reaching out to them (Figure 1.8).[82]

Some urban villages are stable economic and social migrant communities, yet their exact physical boundaries are sometimes unclear.[83] As Li Zhang (2001) explains when describing Zhejiangcun, Beijing's largest and most well established urban village in 1995, "the community has no fixed geographic boundaries and is spread over several large suburban neighborhoods in the Fengtai district in the southern part of the city."[84] These neighborhoods, which are "socially and spatially demarcated migrant enclaves," are called "villages" by urbanites and each urban village is given a particular name to reference the province from which the majority of the residents originated from.[85] For example, in the case of Zhejiangcun, "Zhejiang" refers to the province of origin for most migrants, and "cun" means village, thus, Zhejiangcun is a village of people from Zhejiang Province. Despite how affluent and economically significant some urban villages are, the second part of the their name (*cun*) implies a certain discord with the city. As Zhang (2001) explains, "[a] 'village' within the city thus stands as an anomaly, something out of place and incompatible with the existing urban order of things."[86] This type of incongruent thinking has largely contributed to the widely held perception of urban locals to generally consider migrant settlements in unfavorable terms.[87]

According to Zhang (2001), urban villages are not has homogeneous as most city officials and urban people think they are.[88] The social composition of these villages is rather fluid and diverse, housing both migrants and suburban residents who lease rooms from locals.[89] However, to provide some context, in 2010, Mingfeng Wang, Xiaoling Lin, and Yuemin Ning conducted a study where they were able to obtain data for 1,778 residents from 20 urban villages in Shanghai.[90] In this study they found that 83.2 percent of the urban village residents were migrants, while 16.8 percent were local residents; the education level was relatively low; the sex

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Fulong Wu, "Housing in Chinese Urban Villages: The Dwellers, Conditions and Tenancy Informality," *Housing Studies* 31, no. 7 (October 2, 2016): 852–70, https://doi.org/10.1080/02673037.2016.1150429.

81 Al, *Villages in the City*, 1.
82 Al, 1.
83 Zhang, *Strangers in the City*.
84 Zhang, 19.
85 Zhang, 14.
86 Zhang, 19.
87 Zhang, *Strangers in the City*.
88 Zhang.
89 Zhang.
90 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.

ratio was almost equal; the predominant marital status was married; and the average age was 33.[91] Moreover, the social character of these communities was one where neighbors knew one another well and engaged in a number of ways within in their shared physical space.[92] This sense of community surely facilitated integration processes into the city by helping migrants maintain their current social networks as well as establish new ones that lead them to greater opportunities and a greater quality of life. Independently of the significance that urban villages play for workers in the city, they are razzed on a continuous basis through state efforts to clean up the city—hundreds and hundreds of redevelopment plans exist for villages all over China and millions of people will be affected[93] by the ongoing battle over social order, space, and power.[94] The migrant "communities" in urban villages are "not a natural, fixed, eternal place [or entity]; rather, [they are] constantly made and remade through political and economic struggles in space and time."[95]

The prefabricated dormitories next to the building sites are almost identical. The dormitory buildings are two stories high and are subdivided into two large rooms per floor. Swider (2015) provides a detailed description of the living conditions of migrant workers on a Dongzhimen job site (Figure 1.9):

> On the roof of the workers' dorms, clothes flutter in the breeze, and a few men are bent over small plastic basins, washing clothing or bathing. Inside, the large dorm room is tightly lined with metal-framed bunk beds for roughly twenty-six men. The windows have no glass, and the makeshift covering lets in mosquitoes and dust. Beyond this room, an eight-by-five-foot common area opens into another dorm room on the other side. The only electricity is provided by some crude wiring in the middle of the small common area; it runs a hotpot, a television set, and a light. The items were purchased by one of the gang leaders. The uncovered bulb only dimly illuminates the long dorm room on each side... Personal belongings are stuffed under the bottom bunks and in the corners of the dorm rooms... The lack of personal space leads to many conflicts over missing items, so valuables are hidden under mattresses, sewn into pockets, and tucked into other nooks and crannies.[96]

Compared to other housing options, such as formally build residential areas, or when compared to the living conditions in the workers' home village, dormitory-living on construction sites is substandard housing.[97] Furthermore, as Swider (2015) declares, " these job sites are islands in the cities—physically and socially bounded spaces that re-create the rural-urban divide by

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91 Wu, Zhang, and Webster.
92 Zhang, *Strangers in the City*.
93 Al, *Villages in the City*.
94 Zhang, *Strangers in the City*.
95 Zhang, 18.
96 Swider, *Building China*, 45–47.
97 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*, 92.

reinforcing social exclusion, preventing integration, and keeping workers reliant on labor contractors."[98] These dormitory living conditions are similar to those in Shanghai and other Chinese cities.[99]

In conclusion, the current housing conditions available to Dan, Anlin, and other migrant workers in Shanghai are substandard and inadequate.[100] Migrants and their families face many challenges in the city and require the assistance of designers, city planners, local government officials, and other relevant parties. As an extremely vulnerable social group, migrant workers need an alternative housing model that is specifically designed to help them succeed in the city and improve their quality of life through architectural design.[101] More explicitly, the rural-urban migrant worker population of Shanghai needs community buildings with design concepts that specifically enable them to build a supportive community as they attempt to establish themselves in the cities and continue to be the driving force in the economic success of China.

1.2 METHODOLOGY

As an extremely vulnerable social group living in substandard housing conditions, the migrant worker population is in dire need for a community building with design concepts that promote opportunities to build social networks and communities—a model that not only facilitates the integration of migrants into the city but also helps improve the quality of life. An analysis of the social character of the *Shikumen Lilong* (*lilong*) typology, specifically of the Late-Period *Lilong* style, illustrates that much can be learned from this historical type and suggests present-day solutions for migrant-worker community buildings. Until now, there did not exist a series of design concepts based on the *lilong* typology that designers, planners, developers, and other invested parties, could reference when developing community housing projects for the rural-urban migrant worker population in contemporary Shanghai.

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98 Swider, *Building China*, 44.

99 Al, *Villages in the City*; Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Swider, *Building China*.

100 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Zhang, *Strangers in the City*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Al, *Villages in the City*; Ngai, *Migrant Labor in China*; Swider, *Building China*.

101 Renee Y. Chow, *Changing Chinese Cities: The Potentials of Field Urbanism* (Honolulu: University of Hawaii Press, 2015); Ida Tam, Ran Yan, and Felita Li, *Reconsidering Authenticity Volume 2: Shanghai Lilong*, 1 edition (CreateSpace Independent Publishing Platform, 2016); Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Yisan et al., *Shanghai Shikumen*; Peter G. Rowe and Kuan, eds., *Shanghai: Architecture and Urbanism for Modern China* (Munich ; New York: Prestel Publishing, 2004); Non Arkaraprasertkul and Matthew Williams, “The Death and Life of Shanghai’s Alleyway Houses–Re-Thinking Community and Historic Preservation,” *Review of Culture* 50 (2015): 138–152.

The mass housing *lilong* design was the prevalent residential model in Shanghai by the end of the nineteenth century.[102] The model was an exclusively Shanghainese housing type—a hybrid of sorts with influence from the traditional Chinese courtyard compound and the European townhouse. The housing unit prototype was arrayed in rows and row of houses creating alleys between them which were appropriated by the residents who made them active and vibrant community spaces (Figures 1.10-1.17).[103] Historically, the particular *lilong* community model was not found anywhere else in China[104] and several *lilong* styles were developed beginning in the late 1800's.[105] However, this project focuses exclusively on the Late-Period *Lilong* style because it was the primary style which maximized opportunities for community building and networking.[106] Furthermore, one can argue that the modern history, economy, and political development of Shanghai during the last 150 years can essentially be summarized in the creation and design evolution of the *Shikumen Lilong* housing typology.[107] Therefore, making the *lilong* model a crucial part of Shanghai's history and identity.[108]

In recent years, *lilong* communities have been consistently razed throughout Shanghai, leaving scholars and others wishing to preserve and conserve them physically, yet most not bothering to look significantly past the physical, architectural usefulness of the model (Figures 1.18-1.20).[109] Since they were constructed in the 1920's and 1930's, most *lilong* neighborhoods that are being razed or under consideration for demolition, are simply near the end of their life cycle.[110] The brick walls are decayed and worn down from the intense use, in combination with the lack of significant repairs over the years,[111] they lack modern amenities, and look "very dilapidated."[112] Ruan Yisan (2011) asserts that "the crammed living condition is the biggest difficulty for the people who lived there...[and that b]ecuase of such poor living conditions, previous convenient, comfortable and harmonious life in *Shikumen* houses has deteriorated and become a source of complaint, mostly from the dwellers."[113] Furthermore, the residents who can afford to move out of existing *lilong* neighborhoods have done so already, thus leaving behind either impoverished families or temporary migrant workers.

Government efforts have relocated *lilong* residents into nicer and newer apartment units before razing the *lilong* compounds. Other governmental and developer efforts have led to

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102 Hanchao Lu, *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century*, New Ed edition (Berkeley: University of California Press, 2004).
103 Yisan et al., *Shanghai Shikumen*.
104 Lu, *Beyond the Neon Lights*.
105 Yisan et al., *Shanghai Shikumen*.
106 Lu, *Beyond the Neon Lights*.
107 Lu; Gregory Bracken, *The Shanghai Alleyway House: A Vanishing Urban Vernacular*, 1 edition (Routledge, 2013); Yisan et al., *Shanghai Shikumen*.
108 Chow, *Changing Chinese Cities*.
109 Yisan et al., *Shanghai Shikumen*; Rowe and Kuan, *Shanghai*.
110 Yisan et al., *Shanghai Shikumen*; Rowe and Kuan, *Shanghai*.
111 Yisan et al., *Shanghai Shikumen*; Rowe and Kuan, *Shanghai*.
112 Yisan et al., *Shanghai Shikumen*, 154.
113 Yisan et al., 154.

political and economic strategic preservation and conservation practices exemplified by the commercial development of *Xintiandi*.[114] *Xintiandi,* which translates into "The New Heaven and Earth," used to be a typical *lilong* neighborhood in the former French concession. Through "adaptive reuse" practices, the area was renovated and remodeled into a "hyper-luxury low-rise retail compound both nostalgic to the local residents, and unique to visitors in a city where a modern vision of high-rise buildings has dominated its urban redevelopment for decades." [115] Overall, as Non Arkaraprasertkul and Matthew Williams (2015) further explain "[t]he prevailing trend to date has been to turn [*lilong* communities] into luxury retail shops to make up for the loss of profit should the building be torn down and replaced instead by high-rise buildings."[116] In most cases, however, *lilong* compounds are simply demolished. After all, there can only be so many *lilong* "cultural and architectural" attractions like *Xintiandi* that can exist within any given area in Shanghai.

In Shanghai and other urban Chinese areas, however, the migrant worker population has continued to be treated like a second-class citizen, unworthy of a decent housing model which facilitates their integration into the city.[117] Despite their contribution to the economy, the migrant worker population is only tool of sorts, which resulted from the economic-political transformation that China has been recently undergoing.[118] More specifically, the migrant worker population is the result of the *hukou* system in conjunction with the capitalistic strategies of the state.[119] As such, the political and socio-economical practices in urban regions over the last few decades have led most rural-urban migrants to regard the city in a limited fashion—as a place not for living and establishing a permanent home, but rather as a place of temporary work only.[120] Granted, in recent years, the *hukou* system has been gradually relaxed and housing market forces have been introduced, which have created more opportunities for *hukou* statuses to be changed and goals to be pursued with greater legal protections and benefits from the state.[121] Consequently, the

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114 Yisan et al., *Shanghai Shikumen*. For more information regarding Xintiandi, refer to: Greg Yager and Scott Kilbourn, 'Lessons from Shanghai Xintiandi: China's Retail Success Story', Urban Land Asia (2004); Fulong Wu and Shenjing He, 'Property-Led Redevelopment in Post-ReformChina: A Case Study of Xintiandi Redevelopment Project in Shanghai', Journal of Urban Affairs 27, no. 1 (2005); see Xuefei Ren, 'Forward to the Past: Historical Preservation in Globalizing Shanghai', City & Community 7, no. 1 (2008)., Architectural record, "Xintiandi: Wood + Zapata Reinvents Shangahi's Future by Includint Its Past," Architectural Record, March 2004, http://archrecord.construction.com/projects/portfolio/2012/05/shanghai-tower.asp.

115 Arkaraprasertkul and Williams, "The Death and Life of Shanghai's Alleyway Houses–Re-Thinking Community and Historic Preservation," 143.

116 Arkaraprasertkul and Williams, 143.

117 Li, *Citizenship Education and Migrant Youth in China*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Pow, *Gated Communities in China*; Zhang, *Strangers in the City*.

118 Swider, *Building China*; Li, *Citizenship Education and Migrant Youth in China*; Pow, *Gated Communities in China*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Zhang, *Strangers in the City*; Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*.

119 Swider, *Building China*; Li, *Citizenship Education and Migrant Youth in China*; Pow, *Gated Communities in China*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Zhang, *Strangers in the City*; Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*.

120 Wu, Zhang, and Webster, *Rural Migrants in Urban China*.

121 Liu, *Spatial Mobility of Migrant Workers in Beijing, China*.

migrant worker population is need of a particular kind of community housing project that allows them to build social networks and communities.

The *lilong* model has historically addressed the networking needs of migrant workers in Shanghai but cannot be fully understood and appreciated without taking into account the specific historical circumstances that led to its development and evolution. As such, what is presented in this thesis is a focused architectural and social historical analysis. This is followed by the provision of a series of design concepts, based on the *lilong* model, which are intended as reference points when designing community buildings for building social communities. In chapter two, the vital socio-political factors affecting Shanghai during the late 1800's and early 1900's are documented. The chapter also explains how those critical elements influenced the development and evolution of the architectural elements of the *lilong* typology. The social and architectural character of the *lilong* alleyway is then offered in chapter three—it is the social condition of the phenomenon of alleyway-living that is the foundation for this project. Through alleyway-living, the residents of the *lilong* model were able to connect and build networking opportunities. As such, the purpose of chapter four is to identify and describe the various design concepts based on the *lilong* typology, which made it a successful housing form for migrants in Shanghai in the early 1900's.

The design concepts proposed in chapter four are based on the social temperament of the historical *lilong* typology. Chapter four also provides a design scheme of a "Contemporary *Lilong* style," which strategically integrates the design concepts of this project: graduated privacy, benign panopticon, fluid space, accessibility to neighbors, affordability, variety of unit size, and walkability. The rationale behind developing a series of design concepts rather than merely providing a housing scheme is that designers, planners, developers, and other invested parties, can reference the concepts when developing contemporary housing projects for migrants in Shanghai to facilitate and ensure the integration of key elements into the housing design. The advantage of having a series of design concepts lies in the flexibility of strategically integrating the concepts into a design scheme. Meaning, that by proving a list of elements to take into account when developing migrant housing, this project is actually providing a set of tools with which anyone can design community buildings for building a networking community. So rather than providing one mere housing scheme to begin to address the migrant worker housing issue in Shanghai, the author is providing an approach to help develop various community building designs for building community and networking. As such, the power and strategic advantage of having design concepts available means that these design ideas can be implemented in diverse manners.

The proposed Contemporary *Lilong* Design Scheme is a new form of community housing and is an exploration to successfully and innovatively integrate several of the design concepts in

a way that continues the transformation of the *lilong* typology. The scheme and typology are not the only solutions to the current substandard migrant-worker housing conditions in Shanghai—nor will one housing design and a series of design ideas resolve all of the complex and multidisciplinary issues related to the migrant worker population living in present-day Shanghai. This project is simply the beginning of a conversation to start actively brainstorming for a sustainable solution to the floating population circumstance in contemporary urban China.

To summarize, the *lilong* model worked well to address the fundamental social needs of its residents; however, there were specific factors that led to it functioning as it did. It is not the purpose of the project to mimic or reproduce the particular historical conditions of Shanghai that allowed the *lilong* typology to thrive as it did during the early 1900's. Instead, this project focuses exclusively on the spatial design elements of the historical model which provided the residents with opportunities for social engagement, socialization, networking, and community building—opportunities for various types of relationships to develop between neighbors based concepts like shared interests, occupation, local origin, and age. Whit this in mind, through the implementation of these elements, it is the overall economic success of China as a country and of its citizens, including the migrant workers, which is the intended purpose.

The project required an objective historical account of a design typology and a consequent problem. For this reason, the data collected was primarily peer-reviewed literature and due to the language limitations of the author, only English written documents were analyzed. Additionally, secondary sources were reviewed and analyzed from an interdependent sociological, architectural, and historical perspective that aimed to understand how space affected interpersonal relationships between people and how people, in turn, affected spatial parameters. These elements were then analyzed under a contemporary framework where historical elements were identified and transformed or translated into present-day design parameters to promote a particular social behavior: community building—a design element that is important in all housing projects.

Importantly, this project does not deterministically suggest that because spaces have been designed with a particular intent, the user groups will necessarily utilize said spaces in that specific manner. Nor does this project aim to control the occupants' behavior and dictate who, where, when, and how the spaces will be utilized. However, spaces do have the capacity to influence behavior—history has demonstrated this.[122] As such, specific architectural elements are able to propose and suggest certain types of activities to the user group. Thus, by providing certain spatial opportunities which facilitate a particular type of behavior, the behavior is statistically more likely to occur than it is if those architectural elements were not provided. An

122 Richard Ingersoll and Spiro Kostof, *World Architecture: A Cross-Cultural History*, 1 edition (New York: Oxford University Press, 2012).

excellent example of this phenomenon are the alleyways in the historical *lilong* model and the activities that took place within them—the social behavior of earlier *lilong* residents was not determined exclusively by the architectural *lilong* elements.[123] Even so, this thesis argues that there are some significant and characteristic design elements of the earlier *lilong* typology that could prove useful if reinterpreted for a present-day context.

There were a few challenges, however, to this particular approach and project. Firstly, only secondary and peer-reviewed sources were utilized which limited the project significantly since only a few works met that criteria—exceptions to the reliability and reproducibility of content were made for sources with specifically clear diagrams communicating a particular idea well—However, the content was cross referenced with credible sources. Importantly, it was not the scope of this project to conduct original fieldwork on the topics addressed in this project. There were also problems limiting the content that could be analyzed since many sources were published in Mandarin, which had to be discarded as no translations were available, further constraining how much information could be gleaned about the historical *lilong* model—a research complexity that applied to the topics of migrant workers and their living conditions in Shanghai, as well as their social networking practices specifically within the Shanghai context. Mandarin sources could also not be analyzed regarding recent design strategies and design concepts to house the migrant worker population in a typology which promotes community building. Additionally, at the time this project was written, there was not a single source which combined and synthesized all of these disparate topics. Furthermore, there were no peer-reviewed sources which graphically and in a detailed fashion documented the living conditions of migrant workers in Shanghai—this extends to urban villages, factory dormitories, and dormitories on construction sites in Shanghai. However, from the sources available regarding the living conditions of migrant workers in other Chinese cities, the author was able to paint a partial picture of what migrant workers in Shanghai may experience and what was the architectural and general social sentiment of the *lilong* model.

The work of Non Arkaraprasertkul, titled "*Towards Modern Urban Housing: Redefining Shanghai's Lilong,"* begins to explore the topics which were combined in this project.[124] In his journal article, Arkaraprasertkul proposed to "redefine the abstract concept of the *lilong"* typology.[125] He argued that "the architecture of *lilong* does not confine itself to certain forms or physical configurations; instead it is an "abstract concept" of an urban neighbourhood—the spatial organization, architectural practicality, casual formation of semi-private space, and community

123 Neslihan Turkun Dostoglu, "Architectural Deterministic Thinking In The Development of Urban Utopias, 1848-1947" (University of Pennsylvania, 1986), https://repository.upenn.edu/dissertations/AAI8614783; Robert Gutman, *People and Buildings* (Routledge, 2017).

124 Non Arkaraprasertkul, "Towards Modern Urban Housing: Redefining Shanghai's Lilong," *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 2, no. 1 (March 1, 2009): 11–29.

125 Arkaraprasertkul, 11.

lane-life—a concept that should be taken into account for the design of urban housing today."[126] However, this project proposes to go beyond his ideas by customizing the abstract *lilong* concept for the migrant worker population and their cultural and networking traditions. Furthermore, this project puts forth a series of design concepts that can be implemented in diverse manners to design a community building specifically for building social networks. The advantage of having a series of design concepts is founded in the adaptability and diversity of integration methodologies and processes resulting in a specialized community housing design.

The reader may note that this author has omitted works related to the conservation and preservation approaches of the *lilong* model; despite the significance of these topics. However, this project proposes to look beyond the physical architectural characteristics and significance of the *lilong* model and broaden the breadth of the typology, as Arkaraprasertkul suggests. The reader might also note that the project does not address the interior housing unit condition significantly, nor does the author address the street condition in depth. Although both conditions are fascinating, the scope of this project only encompasses the alleyway-living and social conditions of the *lilong* type from the late 1800's to the early 1900's—the forming years of the *lilong* typology. This approach is also due to the major political changes that China underwent starting in the late 1930's all the way to the present day—all factors which transformed significantly the way people interacted in *lilong* compounds. As such, the early 1900's social character in Late-Period *Lilong* style compounds is what this project focuses on and aims to capture.

Ultimately, this project will be of use to those who are interested in improving the housing conditions of migrant workers in Shanghai in a way that prioritizes and promotes the formation of social networks. This project will also be relevant to those who are invested in continuing the transformation of the *lilong* model and the overall architectural language of the city of Shanghai. What this author offers is a way of abstract thinking and designing which can begin to resolve several of the social, historical, and architectural challenges faced by migrant workers, local governments, professionals, scholars, and local residents in Shanghai and abroad. Furthermore, the design concepts put forth in this project will be of use to those who wish to design community buildings with design concepts for building community not only in the context of Shanghai and China but also internationally. Community building practices are universal and have taken shape throughout the world. Therefore, there are many ways to strategically apply the proposed design concepts in a way that responds to the user group, time, place, and the cultural distinctiveness of each particular region in an appropriate manner.[127]

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126 Arkaraprasertkul, 11.
127 Christopher Long, “Paul T. Frankl’s Pacific Modernism” (University of Hawaii at Manoa, School of Architecture, February 27, 2018).

1.2.1 *LILONG* TERMINOLOGY

The Shanghai *Shikumen Lilong* housing typology is referenced by a variety of names, both in English and in Mandarin. Most commonly, the alleyway housing model is simply referred to as "*lilong*."[128] As the life demands of people evolved in Shanghai, the *lilong* model did as well evolving into several styles, yet the term "*lilong*" came to be a kind of catch-all-term for all of these styles (Table 1.1).[129] Furthermore, some styles were called different names within the literature and in some cases, scholars did not clarify the style they were analyzing, thus, taking for granted the significant social consequences of each style—which are vast in some cases.

The following is a short list of *lilong* terminology to help clarify the various, and sometimes confusing, terms used interchangeably within academia as well as outside of it, and within China as well as internationally:

- ***li***: neighborhood (from *fangli*, an administrative ward) [i]
- ***long***: alleyway. [ii] While acknowledging the importance of word selection and use, this study will use interchangeably several terms used in the literature to refer to the *lilong* alleyways. The most common English terms used to refer to the alleyways are alleys, alleyways, lanes, main alleys, main alleyways, main lanes, central lanes, sub-lanes, branch alleyways, and branch alleys.
- ***tang***: parlor [iii]
- ***lilong***: alleyway house compound or cluster (and the most commonly used Chinese term). [iv] The *long* in the *lilong* name relates to the alleyways that comprise the *li* (neighborhood).[130] Hence, a *lilong* is a neighborhood of alleys.
- ***longtang***: the alley house itself (lit. alleyway-parlor; the term most commonly used in Shanghai itself) [v]
- ***longtang***: the alleyways originally referred to the passages within houses [131]
- ***shikumen***: the alley house itself (literally refers to houses with stone-framed gates an storehouses) [132]
- ***shikumen lilong***: the general name of the residential communities in the old town area of Shanghai [133]
- ***longtang shikumen***: the general name of the residential communities in the old town area of Shanghai [134]

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128 Bracken, *The Shanghai Alleyway House*, 11.
129 Lu, *Beyond the Neon Lights*, 143.
130 Bracken, *The Shanghai Alleyway House*, 11.
131 Yisan et al., *Shanghai Shikumen*, 32.
132 Yisan et al., 31.
133 Yisan et al., 31.
134 Yisan et al., 31.

- ***Shanghai lilong***: residential communities made up of *shikumen* houses [135]

For the purposes of this project, the term "*lilong"* will be used to refer to the "single-bay"[136] housing unit style, recognized by scholars as the "Late-Period *Lilong* style"[137] or "New *Shikumen Lilong* style" (Table 1.1).[138] Additionally, the terms "typology," "model," type," and "design" will be used interchangeably to exclusively signal the Late-Period *Lilong* dwelling and neighborhood style. However, when referencing a different residential style the specific name will be used to indicate a difference in neighborhood and house unit design. This project recognizes the importance and significance of the other *lilong* styles; however, the scope of the project does not encompass the particular details and significance of them.

135 Yisan et al., 33.
136 Lu, *Beyond the Neon Lights*, 149.
137 Yisan et al., *Shanghai Shikumen*, 50.
138 Tam, Yan, and Li, *Reconsidering Authenticity Volume 2*, 11.

CHAPTER 2

THE *LILONG* TYPOLOGY

"Old Shanghai was a freak of nature—

its wildness born of a unique combination of conditions never to be repeated."[139]

- Pamela Yatsko-

139 Bracken, *The Shanghai Alleyway House*, 21.

CHAPTER 2 | THE *LILONG* TYPOLOGY

2.1 INTRODUCTION

As the world has become more interconnected and globalized, Shanghai has revolutionized into one of China's most economically, politically, historically, and culturally influential cities.[140] With one of the world's busiest shipping port, Shanghai is an essential financial center and transportation hub, not only for China but the world as well.[141] Shanghai has become a metropolis resembling many other international cities with expanding Eastern and Western influence notorious of the new millennium.[142] The rapid transformation that Shanghai has undergone as more and more people have migrated to the city, has left a clear imprint on socio-economic, political, religious, cultural, and architectural maters.[143]

With many unintended consequences and transformations, the *Shikumen Lilong* (*lilong*) design became the prevalent residential model for migrants in Shanghai during the early twentieth century (Figures 2.1-2.2).[144] The traditional *lilong* model is an exclusively Shanghainese mass housing type and is not observed anywhere else in China.[145] Moreover, the *lilong* model has historically addressed the social networking needs of migrant workers in Shanghai. This thesis argues that there are some significant and characteristic design elements of the historical *lilong* typology that could prove useful if reinterpreted for a present-day context. An analysis of the social character of the historical *lilong* model illustrates that much can be learned from this earlier typology and the *lilong* type suggests present-day solutions for migrant-worker community

140 Jiahua Pan and Houkai Wei, eds., *Annual Report on Urban Development of China 2013*, 2015 edition (Springer, 2015); Changfu Han, *Migrant Workers In China*, 1st edition (Singapore: Cengage Learning Asia, 2011); Pow, *Gated Communities in China*; Pong, *Educating the Children of Migrant Workers in Beijing*; Yisan et al., *Shanghai Shikumen*.
141 "Top 50 World Container Ports," World Shipping Council, 2006, http://www.worldshipping.org/about-the-industry/global-trade/top-50-world-container-ports/.
142 Rowe and Kuan, *Shanghai*; Chow, *Changing Chinese Cities*; Jay Pridmore, *Shanghai: The Architecture of China's Great Urban Center* (New York: Harry N. Abrams, 2008).
143 Han, *Migrant Workers In China*; Rowe and Kuan, *Shanghai*; Yisan et al., *Shanghai Shikumen*; Lu, *Beyond the Neon Lights*.
144 Lu, *Beyond the Neon Lights*.
145 Lu.

buildings. With the migrant worker population as a vulnerable social group in living substandard conditions, there is great need for a community building with design concepts for building a social community—a model that not only facilitates the integration of migrants into the city but also helps to improve their quality of life.

Importantly, the *lilong* typology cannot be fully understood and appreciated without taking into account the specific historical circumstances that led to its development and evolution. Shanghai's unique political, economic and cultural history directly informs the need and evolution of the *Shikumen Lilong* typology. Furthermore, one can argue that the history, economy, and political development of Shanghai for the last 150 years can essentially be summarized in the creation and design evolution of the *Shikumen Lilong* housing typology.[146] Therefore, making the *lilong* model a crucial part of Shanghai's history and identity.[147] This chapter briefly documents the vital socio-political factors affecting Shanghai during the late 1800's and early 1900's that facilitated the particular architectural and social development of the Late-Period *Lilong* housing style.

2.2 Brief History of Shanghai

From 1845 to 1941, Shanghai was run by three different administrations: the British/American, French, and the Chinese.[148] Each entity governing its own autonomous region: the British/American Settlement (later known as the International Settlement), the French Concession and the Chinese City, respectively (Figure 2.3).[149] According to Stella Dong, Shanghai was a city that was "[h]alf Oriental, half Occidental; half land, half water; neither a colony nor wholly belonging to China; inhabited by the citizens of every nation in the world but ruled by none."[150] Shanghai's distinctive state of being is further supported by Pamela Yatsko asserting that:

> Old Shanghai was a freak of nature—its wildness born of a unique combination of conditions never to be repeated. These included weak central government in China; a huge foreign population that did not have to worry about Chinese law; foreign settlements managed by businessmen with the most laissez-faire mindset; a position as China's major opium transshipment point; and an immigration policy that did not require passports.[151]

146 Lu; Bracken, *The Shanghai Alleyway House*; Yisan et al., *Shanghai Shikumen*.
147 Chow, *Changing Chinese Cities*.
148 Lu, *Beyond the Neon Lights*.
149 Lu.
150 Bracken, *The Shanghai Alleyway House*, 21.
151 Bracken, 21.

There is no question that the events which lead to Shanghai's particular position during those years are exceptional. Some of the political events which facilitated the "freak of nature" existence that Shanghai was claimed to have, began to develop in 1840 and revolved around the Opium Wars.[152]

2.2.1 THE OPIUM WARS

Western powers, particularly Britain, first became interested in Shanghai, due to its success as a commercial centre and wanted to participate in the lucrative trade in tea, porcelain, silk and cotton, that China was profiting from. China had been dominating control over these trades and was causing a deficit for Western powers, again particularly Britain. As a result of this, Britain opted to import a more financially advantageous product; Bengali opium. China objected to this, and after the Governor of Canton (now Guangzhou) ordered to have stocks of the drug destroyed, Britain retaliated, initiating the first Opium War (1840-1842).

The Treaty of Nanking was ratified in 1843, which forced Shanghai and four other treaty ports to be open to foreign trade and settlement.[153] British merchants began to arrive in Shanghai immediately after and the French began to occupy the land between the British Settlement and the old Chinese city in 1849.[154] The Americans established their settlement on the north side of Suzhou Creek, located north of the British Settlement.[155]

The Second Opium War (1856-1860), a joint effort by France and Britain, ended in another humiliating defeat for China.[156] The Treaty of Tientsin, ratified in 1860, ended the war.[157] The treaty opened the Yangtze River to western trade.[158] The Chinese government also saw themselves legalizing the drug trade when the treaty forced them to allow tariffs on the importation of opium, stocks of which were stored in sailing hulks moored in Shanghai.[159] After 1860, opium dens could be found throughout Shanghai, facilitating a habit with devastating consequences that rapidly spread from the upper classes to every level of society.[160]

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152 Bracken, 21.
153 Lu, *Beyond the Neon Lights*; Bracken, *The Shanghai Alleyway House*.
154 Bracken, *The Shanghai Alleyway House*.
155 Bracken.
156 Bracken.
157 Bracken.
158 Bracken.
159 Bracken.
160 Bracken.

2.2.2 SHANGHAI'S MODERN REAL ESTATE MARKET

The dramatic increase in population and economy during the middle of the nineteenth century, which gave rise to Shanghai's modern real estate market and fueling the development of the *lilong* community design, is rooted in the development of two wars: the Small Swords Uprising and the Taiping Rebellion.[161] The Small Swords, or the Triads, were a rebellious band that took the county seat of Shanghai from September 1853 to February 1855.[162] The fight for the seat caused the first of many refugees to move into the foreign settlements despite the fact that their legal status would be unclear since up to that point only Westerners were allowed to reside there.[163] More than 20,000 refugees from the county seat had moved into foreign areas in Shanghai by 1854.[164] Those who worked inside the settlements were eventually allowed to live inside them, even when they were not exclusively seeking the protection of the West.[165]

The Taiping Rebellion (1850-1864), whose capital was two hundred miles northwest of Shanghai in Nanjing, propelled many of the Chinese population into Shanghai, most from the vicinity of Shanghai.[166] The Rebellion marched several times into Shanghai from 1860 to 1862, thus driving the majority of these people to relocate during those years.[167] Sources report that the population in the International Settlement increased to 92,884 by 1865, and about 50,000 Chinese people moved into the French Concession.[168] Well over 110,000 Chinese had moved into Shanghai's foreign settlements by the end of the Taiping Rebellion in 1864,[169] and as many as 300,000 had migrated into a region in Shanghai by the end of the Taiping Rebellion.[170] With such large population increases, Shanghai was the "fastest growing city in the world, faster than any of the other boomtowns such as San Francisco, Chicago, or Melbourne," as described by Stella Dong.[171]

The business of constructing and renting houses to the Chinese boomed after the Taiping Rebellion.[172] Property speculation made many investors quite wealthy.[173] From 1850 to 1862, the cost of an acre increased from about £50 to £20,000.[174] Between 1853 and 1854, more than 800 two-story row houses had been built in the British Settlement along Guangdong Road

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161 Lu, *Beyond the Neon Lights*; Bracken, *The Shanghai Alleyway House*.
162 Lu, *Beyond the Neon Lights*.
163 Lu.
164 Lu.
165 Yisan et al., *Shanghai Shikumen*.
166 Lu, *Beyond the Neon Lights*.
167 Lu.
168 Lu, 139.
169 Lu, 139.
170 Bracken, *The Shanghai Alleyway House*, 29.
171 Bracken, 29.
172 Lu, *Beyond the Neon Lights*, 139.
173 Bracken, *The Shanghai Alleyway House*, 29.
174 Bracken, 29.

and Fuzhou Road.[175] By 1860, the British Settlement had seen over 8,700 alley houses constructed.[176] However, due to safety reasons, the construction of blockhouses was prohibited by concession authorities in 1860.[177] Unable to walk away from the profits and tax revenues in the housing industry, developers and concession authorities continued the construction of residences.[178] However, they did this at a higher-quality standard.[179] Some of these houses still exist today. [180]

The *Shikumen* residences were inhabited by the Chinese, yet owned by foreigners.[181] The real estate market was initiated and dominated by Westerners.[182] These Westerners, who were all large landowners, were additionally, in positions of authority and power within the concessions: the military, the state representatives, the religious orders, and the business community.[183] Many of the Taiping Rebellion refugees who relocated in Shanghai were bureaucrats and wealthy landlords.[184] Their affluence allowed the Chinese to invest in the real estate market along with the Westerners.[vi] To illustrate the role of Chinese investors in the housing market, one only need to look to Shanghai's "Four Elephants." [185] The Four Elephants referred to four Chinese families who owned may of the Nanking Road (known as Nanjing Road today) *Shikumen* compounds.[186] Once in Shanghai, the Four Elephants continued their tea and silk business.[187] However, they shifted their economic resources primarily to the housing sector of Shanghai.[188]

By 1930, Shanghai was already a city with three million people.[189] The vast majority of whom were Chinese, 2.85 million, were ruled by a small amount of elite foreigners and Chinese.[190] Despite the fact that the exact percentage fluctuated from 36 percent to 60 percent between 1869 and 1933, the real estate along Nanking Road (known as Nanjing Road today) was owned predominantly by foreigners.[191] For example, Silas Aaron Hardoon, a foreigner, owned close to 50 percent of the real estate along Nanking Road in 1930.[192] Note that residences

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175 Lu, *Beyond the Neon Lights*, 139.
176 Yisan et al., *Shanghai Shikumen*, 29.
177 Yisan et al., 29.
178 Yisan et al., 29.
179 Yisan et al., 29.
180 Yisan et al., 29.
181 Lu, *Beyond the Neon Lights*, 140.
182 Lu, 141.
183 Eric Firley and Caroline Stahl, *The Urban Housing Handbook*, 1 edition (Chichester, England ; Hoboken, NJ: Wiley, 2009), 135.
184 Lu, *Beyond the Neon Lights*, 141.
185 Lu, 142.
186 Lu, 142.
187 Lu, 142.
188 Lu, 142.
189 Bracken, *The Shanghai Alleyway House*.
190 Bracken.
191 Lu, *Beyond the Neon Lights*, 141.
192 Lu, 141.

along Nanking Road were the most expensive area in the city.[193] *Lilong* houses were first built on Nanking Road in late 1875.[194]

Seven decades since the emergence of the *lilong* housing model was developed, more than 72 percent of Shanghais dwellings were alleyway houses.[195] Of those 72 percent, three quarters were *Shikumen* residences (Figure 2.1).[196] Many of the old houses located on Nanking Road from the previous century were remodeled by 1940 into *lilong* housing.[197] As the primary living space for day-to-day activities for almost one-and-a-half centuries, ordinary Shanghainese people did not especially care about the real estate market in Shanghai[198]—what they cared about was the grassroots level of operation of the *lilong* typology.[199]

2.3 LATE-PERIOD *LILONG* STYLE

2.3.1 THE HYBRID

The *Shikumen Lilong* represents an economic opportunity responding to a housing shortage, where European and Chinese landowners invested in the development of a speculative mass housing model based on the *Shikumen* unit prototype.[200] The *Shikumen Lilong* is a hybrid between the more traditional Chinese courtyard compound and the European townhouse, arrayed along alleys establishing one large neighborhood (Figures 2.4-2.9).[201] Paved alleys, three to five meters wide, were situated between the rows of houses to provide access to the units, along with a light and ventilation source. [202] Both, the alleys and individual *Shikumen* units served many unintended purposes as the inhabitants took control of their environments over time, personalizing their neighborhoods for their individual desires and needs (Figures 2.10-2.19).[203]

Foreign and affluent Chinese landowners designed and approved the layout of the residential blockhouses in a matter that reflected the community housing trends of western countries.[204] However, the actual construction of the neighborhoods was completed by Chinese

193 Lu, 141.
194 Bracken, *The Shanghai Alleyway House*.
195 Lu, *Beyond the Neon Lights*, 142.
196 Lu, 142.
197 Lu, 142.
198 Lu, 142.
199 Chunlan Zhao, "From Shikumen to New-Style: A Rereading of Lilong Housing in Modern Shanghai," *The Journal of Architecture* 9, no. 1 (March 1, 2004): 1.
200 Chow, *Changing Chinese Cities*.
201 Lu, *Beyond the Neon Lights*.
202 Yisan et al., *Shanghai Shikumen*.
203 Lu, *Beyond the Neon Lights*; Chow, *Changing Chinese Cities*; Bracken, *The Shanghai Alleyway House*.
204 Yisan et al., *Shanghai Shikumen*.

workers who integrated building techniques with Chinese features into the western designs.[205] The materials for the construction of the newly built houses in the early 1870's were brick, wood, and cement.[206] Since ancient times, traditional Chinese dwellings have been built using earth, wood, bricks, and tiles.[207] Historically, Chinese architecture emphasizes the harmonious existence between nature and the human being and is focused on the courtyard compounds.[208] Rooted in the collective, courtyard compounds epitomize the way of life of the Chinese. This community residential design supports the shared spatial practices over the private individual needs.[209]

To maximize profits in an area of limited space within the borders of the concessions, developers and concession authorities pushed for a block design that would fit as many houses in it.[210] As such, the *shikumen* construction, based on the row-house community design in Europe was approved, tightly fitting row-after-row of houses into the least amount of space.[211] This particular community design rooted in maximizing profits by fitting as many units into the least amount of space is one of the things which completely differentiates the S*hikumen Lilong* typology from all other residences in China's history."[212]

2.3.2 LATE-PERIOD *LILONG* STYLE

The Qing Dynasty was overthrown in 1911 and the change in governance led to the breakdown of extended families into nuclear ones and a new form of housing type was needed.[213] This new dwelling need was addressed by the Late-Period *Lilong* Style, which was similar but different than the early models—it was a shift away from the five-bay and three-bay *shikumen* residences towards cheaper and smaller two-bay houses, and eventually to the well-known "single-bay"[214] *lilong* housing unit type, referrenced by scholars as the "Late-Period *Lilong* style"[215] or "New *Shikumen Lilong*"[216] style (Figures 2.7, 2.9, 2.20, and Table 1.1).

The Late-Period *Lilong* Style peaked during the 1920's and 1930's and the vast majority of *lilong* neighborhoods were built in this style during this time period.[217] In this Late-Period Style,

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205 Yisan et al.
206 Lu, *Beyond the Neon Lights*.
207 Yisan et al., *Shanghai Shikumen*.
208 Ronald G. Knapp and Kai-Yin Lo, eds., *House Home Family: Living and Being Chinese*, First Edition; 2nd Printing edition (Honolulu : New York: University of Hawaii Press, 2005).
209 Knapp and Lo.
210 Yisan et al., *Shanghai Shikumen*.
211 Yisan et al.
212 Yisan et al.
213 Yisan et al.
214 Lu, *Beyond the Neon Lights*, 149.
215 Yisan et al., *Shanghai Shikumen*, 50.
216 Tam, Yan, and Li, *Reconsidering Authenticity Volume 2*, 11.
217 Yisan et al., *Shanghai Shikumen*.

the traditional Chinese flavor was still present while merging uniquely with Western influences in spatial layout and decoration style.[218] Stone-arch-gates (*shi-ku-men*), that marked the main entrances on the southern side of the houses, were characteristically crafted with simple inscribed designs of things such as birds, insects, flowers and beasts.[219] Concrete balconies were also added to house facades, which inspired an "open-mind" attitude in the *shikumen* population.[220] No sanitary equipment was introduced into this new housing model, except for a washstand.[221] However, concrete floors and load-bearing brick walls were implemented to make them more affordable and by the early 1950's, about fifty percent of the residential buildings in Shanghai were modeled in the Late-Period *Lilong* style (Figures 2.7, 2.9, 2.20, and Table 1.1).[222]

A single-bay housing unit typically had a frontage of about 10-13 feet (3.2-3.9 meters), a depth of about 40-46 feet (12-14 meters), or a floor area of approximately 500 square feet (46.5 square meters) including the yard space, and it was two stories tall, each floor approximately 13 feet (4 meters) high (Figures 2.7, 2.9, 2.20, and Table 1.1).[223] As stated above, the single-bay house was replicated and arrayed in rows of houses—a simple and repetitious design that was adaptable to specific lot sizes.[224] Finally, on the periphery of the compound were shop-houses that blurred the spatial order between residential and commercial spaces.[225]

2.4 CONCLUSION

The unique socio-political factors influencing Shanghai during the late 1800's and early 1900's were vital to the particular architectural and social development of the *lilong* typology and the model cannot be fully appreciated without taking those elements into account. The *lilong* type, and its various styles, represent Shanghai's transformation during that period—it is a response to the social, political and economic changes manifested in housing shortages. As a hybrid between the traditional Chinese courtyard compound and the European townhouse, the single-bay *lilong* type became the prevalent residential model for migrants in Shanghai during the early twentieth century; thus, making it an essential part of the city's history.

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218 Yisan et al., 67.
219 Lu, *Beyond the Neon Lights*.
220 Yisan et al., *Shanghai Shikumen*, 68.
221 Yisan et al., *Shanghai Shikumen*.
222 Yisan et al.
223 Lu, *Beyond the Neon Lights*; Tam, Yan, and Li, *Reconsidering Authenticity Volume 2*.
224 Lu, *Beyond the Neon Lights*.
225 Bracken, *The Shanghai Alleyway House*. Chapter 3 discusses in details the aspects of shop-houses in *lilong* neighborhoods.

The rapid industrialization and urbanization transformations which Shanghai underwent left a clear imprint on socio-economic, political, religious, cultural, and architectural maters.[226] To this day, migrants have continued to move to Shanghai to pursue a more affluent and diversified lifestyle. However, the migrant worker population has become a vulnerable group that is routinely living in substandard housing conditions and has a significant need for a community housing project—a model that not only facilitates the integration of rural-urban migrant workers into the city but also helps improve their quality of life. As such, by historically addressing the social networking needs of migrant workers in Shanghai, the Late-Period *Lilong* typology can prove instrumental, if interpreted for present-day migrant-worker community housing projects with design concepts that specifically enable workers to build a supportive community.

226 Han, *Migrant Workers In China*; Rowe and Kuan, *Shanghai*; Yisan et al., *Shanghai Shikumen*; Lu, *Beyond the Neon Lights*.

CHAPTER 3

THE CHARACTER OF THE *LILONG* ALLEYWAY

*"*Lilong *is not just a unique architectural typology or [sic] historic heritage, but a form of self-social organization, a way of life."*[227]

227 Tam, Yan, and Li, *Reconsidering Authenticity Volume 2*, 28.

CHAPTER 3 | THE CHARACTER OF THE *LILONG* ALLEYWAY

3.1 INTRODUCTION

The notion of *jia,* which translates into the English concepts of, "house," "home," and "family," often separated and distinct in European countries, is a concept that cannot be separated in China.[228] Gregory Bracken (2013) stresses that is essential for Western readers to understand the importance of *jia* when looking at the traditional Chinese family life.[229] Nancy S. Steinhardt supports Bracken's argument by explaining that "in the Chinese mind a house has neither purpose nor meaning without the family that makes it a home."[230] In this same way, the essence and the success of the *lilong* typology is a direct result of the interrelationships between society and public space. Meaning, the relationships between the people and families that inhabited the *lilong* neighborhoods and the physical *lilong* spaces themselves, especially the relationships within the *lilong* alleyways.

The unique interplay between the alleyway spaces and society led the historical Late-Period *Lilong* style to effectively address the networking needs of migrant workers. If strategically interpreted for a present-day context, the characteristic design elements of the alleyway social condition could prove useful when designing migrant worker housing projects in Shanghai. Historically, migrant workers have relied on their social networks to establish themselves in the city. As such, the *lilong* is a noteworthy and important housing model to reference when designing community buildings with design features that specifically enable migrant workers to build communities and social networks. With that in mind, this chapter provides an overview of the *lilong* alleyways and their significance in determining the social character of the *lilong* housing typology. What follows is an architectural description of the alleys along with the identification of

228 Bracken, *The Shanghai Alleyway House*, 101.
229 Bracken, *The Shanghai Alleyway House*.
230 Bracken, 13.

the most common ways in which the traditional Chinese family used the Shanghainese *lilong* lanes.

3.2 ALLEYWAYS: ARCHITECTURAL CHARACTER

As reported by Hanchao Lu's (1999) notable work, alleyway-house compounds were greatly varied in style and size.[231] With each mix in the alleyway-house compound, the layout of the alleyways themselves differed in width and quantity as well. However, throughout most of the architectural development of the *lilong* housing typology, the organization of the residential units and alleys remained relatively consistent, especially in the Late-Period *Lilong* style discussed in Chapter 2.[232]

The historical *lilong* mass housing model was based on the unit prototype: the *shikumen* residential unit.[233] The *shikumen* housing design was a combination of a Chinese courtyard and a Western row house design.[234] The Late-Period *Lilong*-type typically had a long and narrow floor plan, characteristic of the row house and was usually two floors high.[235] The front portion of the unit consisted of a "skywell" or small courtyard, fronted by a high wall on the south side of the house with an elaborately carved gate as the main entry (Figure 3.1).[236] S*hi-ku-men* translates into English as "stone-arch-gate (or door)," hence the housing type name.[237] The specific stone-arch-gate designs for the *shikumen* in each compound were diverse, but they all had a decorative architrave, many with a curving eave theme (Figure 3.2-3.3).[238]

These *shikumen* houses were pitted against each other and arrayed within a large compound forming various alleys between the rows of houses to serve as access points for each unit.[239] There were two types of alleys: 1) main or general lanes and; 2) branch alleyways or sub-alleys which ran perpendicular to the main lanes and parallel to the other sub-alleys in the community (Figure 3.4-3.5).[240] In most *lilong* neighborhoods, the main alleys were no less than 13 feet wide (4 meters), and the branch lanes were about 8 feet wide (2.5 meters), enough to allow a rickshaw to get through.[241]

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231 Lu, *Beyond the Neon Lights*.
232 Lu.
233 Chow, *Changing Chinese Cities*.
234 Tam, Yan, and Li, *Reconsidering Authenticity Volume 2*.
235 Lu, *Beyond the Neon Lights*.
236 Bracken, *The Shanghai Alleyway House*, 93.
237 Bracken, 11.
238 Samuel Y. Liang, “Where the Courtyard Meets the Street: Spatial Culture of the Li Neighborhoods, Shanghai, 1870—1900,” *Journal of the Society of Architectural Historians* 67, no. 4 (December 1, 2008): 482–503, https://doi.org/10.1525/jsah.2008.67.4.482.
239 Chow, *Changing Chinese Cities*.
240 Liang, “Where the Courtyard Meets the Street.”
241 Bracken, *The Shanghai Alleyway House*.

The more recent styles of the *lilong* compounds had wider lanes than the older style neighborhoods; main lanes being approximately 16.5 feet wide (5 meters) and branch alleyways being about 11.5 feet wide (3.5 meters) (Table 1.1).[242] Several of the recent styled communities even had several main alleyways, such as the *Jianye Li* (Alley of Establishing Careers), built in the French Concession in 1930 (Figure 3.6).[243] Three main entrances from the street serviced the 260 units, which were lined up in 22 rows.[244] Each of the central alleyways had sub-lanes which branched off in both directions perpendicular to it.[245] Some of the branch lanes were even accessible directly from the street.[246] Garages were also constructed into the better and more affluent New-Style *lilong* compounds suggesting that residents owned private vehicles.[247] As such, the primary lanes were widened to almost 20 feet (6 meters) to accommodate the vehicular needs of residents; the branch lanes also widened to about 12 feet wide (3.5 meters).[248]

Despite the convenient modern amenities provided in the New-Style *lilong* compound designs in the 1930s, the majority of the growing population in Shanghai continued to demand the older designs of the *lilong* typology because they could not afford the more modern *lilong* communities.[249] Responding to the housing demand, developers limited the width of alleys significantly to the point that it was not uncommon to see branch lanes which were only about 5 feet wide (1.5 meters).[250] These extremely narrow alleyways were named "one thread of sky."[251] The name was derived from the famous Mount Lingyan of Suzhou because the sky looks like a piece of thread when looking up from the small gap located between two of its sharp peaks.[252]

At the entrance of each alleyway when coming from the street, one would consistently find a variety of formal shops and open stalls providing several convenient services to the *lilong* community residents, such as cigarettes, snacks, boiled water, and a range of delicious, fast, and affordable meal options (Figure 3.7).[253] Overall, the alleyways were the most extensive public spaces within the *lilong* communities.[254] These spaces were crucial for the social character and development of the Late-Period *Lilong* style.[255]

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242 Lu, *Beyond the Neon Lights*.
243 Lu.
244 Lu.
245 Lu.
246 Lu.
247 Lu.
248 Lu.
249 Lu.
250 Lu.
251 Lu, 152.
252 Lu, *Beyond the Neon Lights*.
253 Yisan et al., *Shanghai Shikumen*.
254 Yisan et al.
255 Lu, *Beyond the Neon Lights*.

3.3 ALLEYWAYS: SOCIAL CHARACTER

As the most significant public spaces of the *lilong* typology, the alleyways were not only the "traffic arteries"[256] of each community as described by Ruan Yisan (2011), they were also where the well-known social character of the Late-Period *Lilong* typology developed. Additionally, the "ambiguous"[257] alleyway spaces met many of the needs of rural-urban migrants.[258] The needs of rural-to-urban migrants were simple in many regards. When rural-to-urban migrants first relocated to the city from their country homes, mostly migrants had three priorities:

- Find a stable form of employment[259]
- Establish a social network to help them succeed in the city[260]
- Obtain an affordable place to live for themselves with the possible long-term goal of having their family join them in the city.[261]

The Late-Period *Lilong* design had the potential to address all three of these primary migrant needs. One could find affordable *shikumen* units for rent for a single person (one room only within a shared home) or for a more extensive family composition (several rooms within a shared home or one entire *shikumen* for the family, as finances allowed).[262] One could also set up the *shikumen* as a shop-house if the unit was on the periphery of the compound and provide oneself and other family members a stable form of employment.[263] One could set up small and temporary stands along the main *lilong* lanes to sell handy items and services to other *lilong* residents, such as warm meals, clothing, shoes, bikes, cigarettes, newspapers, magazines, candy, and vegetables, to name a few business options.[264]

Additionally, one could also form strong social networks within the Late-Period *Lilong* style alleyway spaces (Figure 3.8).[265] According to Ronald G. Knapp, two key factors, the *lilong's* hierarchal spatial layout and flexible use of space, facilitated social networking opportunities within the *lilong* community.[266] During the early twentieth-century affordable housing was in short supply in Shanghai due to the high land costs and the significant population growth in the city.[267] As such, the proximity of each unit, coupled with the limited spaces shared led to many of the daily chores taking place outside in the alleys, such as cooking; washing vegetables, clothes, and

256 Yisan et al., *Shanghai Shikumen*, 89.
257 Bracken, *The Shanghai Alleyway House*, 107.
258 Yisan et al., *Shanghai Shikumen*.
259 Zhang, *Strangers in the City*.
260 Zhang.
261 Zhang.
262 Lu, *Beyond the Neon Lights*.
263 Lu. More details about the *lilong* shop-house in the Mixing Commercial and Residential section bellow.
264 Arkaraprasertkul, “Towards Modern Urban Housing.”
265 Lu, *Beyond the Neon Lights*.
266 Knapp and Lo, *House Home Family*; Bracken, *The Shanghai Alleyway House*.
267 Lu, *Beyond the Neon Lights*.

dishes; eating meals; and sitting relaxing with friends (Figure 3.9).[268] The lanes essentially became semi-private extensions of each *shikumen* residential unit.[269] Overall, from work to play, the alleys within the *lilong* neighborhoods hosted a wide-range of communal activities that varied depending on their location in the alleyways as dictated by the *lilong's* hierarchal layout and flexible use of space.[270]

3.3.1 GRADUATED PRIVACY

The alleyway's flexible use of space was a critical architectural, economic, cultural, and social feature of the Late-Period *Lilong* typology. "Graduated privacy" is a term borrowed by Gregory Bracken (2013) from Nelson I and it was utilized to describe this flexible use of space. Wu's work analyzing the traditional courtyard homes in China, *Chinese and Indian Architecture,* was further used to describe the alleyway's flexible use of space, which primarily laid in the *lilong* spatial and social hierarchical system.[271]

Within a typical Late-Period *Lilong* style compound, the idea of "graduated privacy" began at the street level, slowly moved through the lanes, and ended at the individual *shikumen* residences. As Knapp (2005) illustrates, the concept of "graduated privacy" relates to "a hierarchy involving streets, lanes, sublanes and individual *longtang* that provide a layering of public space, semi-public space, semi-private space, and private space."[272] Specifically, this means that within the *lilong* neighborhoods the main streets surrounding the compound were the public spaces.[273] The main alleys were the semi-public spaces and the branch alleyways were then the semi-private spaces.[274] The interiors of the individual *shikumen* housing units comprised the private spaces (Figure 3.10).[275]

In a similar urban- and social-organization pattern as Jane Jacob's "organized complexity," which she identifies as being extremely important to the healthy life of an urban street, the *lilong* alleyways may have seemed haphazard and random at first glance.[276] However, as stated previously, the types of activities which took place within the *lilong* lanes depended on

268 Yisan et al., *Shanghai Shikumen*.
269 Liang, "Where the Courtyard Meets the Street."
270 Bracken, *The Shanghai Alleyway House*.
271 Bracken, 2.
272 Knapp and Lo, *House Home Family*, 259.
273 Liang, "Where the Courtyard Meets the Street."
274 Liang.
275 Liang.
276 Jacobs, *The Death and Life of Great American Cities*, 439.

the type of space one was inhabiting, which followed the rigid and logical system of the spatial hierarchy leading from the gradual communal sense of public to private spaces.[277]

Some public and semi-public spaces were ideal for particular types of formal and informal commercial activities. For example, as is particularly relevant to this chapter, within the main lanes one could buy basic groceries and other items as well as greet passing neighbors.[278] The central alley granted the vendor greater visibility and sale opportunities because of the higher number of people from the neighborhood passing by that section. Hence, a business person was more likely to prefer to set up a merchandise cart along the main alleyways (to maximize their potential for profit) versus locating the stand at the end of a less-visible branch alley (less chance of maximum profit).

In the same way, within the smaller and less travelled alleyways one could find the adults doing a variety of activities such as playing mahjong, sitting and chatting, cooking, washing dishes, and repairing bicycles (Figures 3.8, 3.11-3.21). Children playing diverse games could also be found in these same branch alleyways because they were more private and secure than the main alleys (Figures 3.24-3.25). The idea for a lot of these more private activities was to do them in the semi-private or entirely private spaces of the compound. Thus, one was less likely to be in the way of other more public communal activities which could potentially impact other residents.[279]

The primary function of the lanes was to connect the *lilong* residences with the rest of the city, thus giving the inhabitants access to the wanted elements of Shanghai avoiding the unwanted ones.[280] This sense of vulnerability (real or perceived) resulted in the dwellers' desire to control access into the *lilong* communities and to the development of a self-surveillance system.[281] One of the significant spatial factors that facilitated the development of an effective self-surveillance arrangement between residents was the alleyway's graduated, yet rigid hierarchical system.[282] This self-surveillance method permitted the tenants to have a sense of control and management of their contact with visitors and strangers coming into the *lilong* compounds, especially within the semi-private spaces (branch lanes).[283] Consequently, it was a common practice for the occupants to police or watch and supervise one another closely.[284] As Bracken (2013) describes it, "policing"[285] was to be aware of any strangers and visitors passing through the main alleyways to ensure that they did not go into the areas that they did not seem to

277 Bracken, *The Shanghai Alleyway House*.
278 Bracken.
279 Bracken.
280 Bracken.
281 Bracken.
282 Bracken.
283 Bracken.
284 Lu, *Beyond the Neon Lights*.
285 Bracken, *The Shanghai Alleyway House*, 102.

be authorized to access. This included, for example some of the more private branch lanes or the interiors of *shikumen* units. This sense of security, safety and overall protection from the city was a significant function which was possible due to the layout of the lanes, which in turn enhanced the sense of camaraderie within the *lilong* residents.[286]

Bracken (2013) utilizes the term "benign panopticon" to capture the street surveillance self-regulating phenomenon, as seen within the Late-Period *Lilong* style compounds.[287] Furthermore, the panopticon, designed by the social theorist and philosopher, Jeremy Bentham, was a form of institutional building which was constructed around the concept and practice of visibility. Visibility was essential to Bentham's paradigm of control and supervision over prison inmates and the security guards had a central observation station that was framed by the prison cells—thus, lending an ambiguous-omnipresence sort of sentiment.[288] Innovatively, Bracken's (2013) "benign panopticon" refers rather to a gentle, kind, and healthy sort of system of social control.[289]

The socio-cultural effectiveness of the Shanghai alleyway house, as described by Bracken (2013), depended on visibility; "visibility where everyone can act as a surveyor, as well as be surveyed."[290] He additionally supports his "benign panopticon" idea by pointing out that this street-surveillance system was mutually beneficial and healthy for residents who were concerned and invested in one another's safety.[291] This form of mutual trust and commitment to safety and security within *lilong* compounds resulted in a "wonderful generator of healthy and vibrant social life."[292] Street-surveillance systems by the inhabitants of those streets resonates with Jane Jacob's (1992) perspective affirming that community street-surveillance is a desired and good element for thriving urban neighborhoods.[293]

Once again, the structural configuration and the resulting social, self-organizing hierarchal agreement within the *lilong* alleys, is what facilitated the existence of a mutually beneficial system of visibility.[294] This system of visibility in the alleyways was a reflection of how society has used the urban streets in a more "traditional Chinese way of life," especially in the case of a globalizing Shanghai.[295] Bracken (2013) declares that "these finely grained alleyways managed to engender their unique street life because of their opposition to, and contrast with, the rest of the Western-style city."[296] He reasons that the *lilong* community's social success was

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286 Bracken, *The Shanghai Alleyway House*.
287 Bracken, 110.
288 Jeremy Bentham, *Panopticon Or the Inspection House*, 1791.
289 Bracken, *The Shanghai Alleyway House*.
290 Bracken, 110.
291 Bracken, *The Shanghai Alleyway House*.
292 Bracken, 102.
293 Jacobs, *The Death and Life of Great American Cities*.
294 Bracken, *The Shanghai Alleyway House*.
295 Bracken, 112.
296 Bracken, 112.

partially due to the potential rejection of the Western-style and culture in Shanghai. However, he also notes that "[t]he panoptic function engendered in the alleyway house a rich and vibrant street life, reflecting the incredible fecundity of this unique commingling of East and West."[297] Bracken's theory is a useful assessment as the *lilong* typology is a "capitalistic"[298] hybrid of development between "the local and foreign cultures."[299] Additionally, the essence and power of the Late-Period *Lilong* style lies in how well it resolved many socio-political and economical challenges within each expansive land plot.[300]

Bracken (2013) thus proposes that the function of a "benign panopticon" of social visibility is what gave Shanghai's alleyways their vibrant and culturally rich character.[301] Moreover, that it is this cultural richness and vibrancy what architects, urban planners, and developers should be "seeking to recapture when attempting to learn from the city's past, not simply redecorating empty alleyway houses so that international coffee-shop chains can have a prettier premises in which to do business."[302] As Renee Chao (2015) proposes as well, we should aspire to continue the transformation of the urban morphology; the clear legibility; variety; and the unique spatial traditions of Shanghai[303]—traditions and legibility which has taken centuries to form.[304] This urban legibility comprised of the *lilong* typology, is what, by the end of the 1940's, had encompassed more than 72 percent or the city's dwellings.[305] The *lilong* compound is therefore a significant Shanghainese housing model that Shanghai's contemporary planners and designers cannot ignore. As such, and as Chao (2015) recommends, "Shanghai has the potential to lead with a new, progressive urbanism in the twenty-first century, and one that's defined by its cultural sustenance, as well as material and ecological."[306] This continued transformation of the *lilong* typology is consequently a component of the author's proposed design recommendations and it will be further addressed in the final chapter pertaining to worker's housing.

3.3.2 FLUID SPACE

Bracken (2013) observes that generally, the Chinese population has tended to spend more of their time on the streets than people in Western regions have, such as Europe and the

297 Bracken, 113.
298 Bracken, 8.
299 Zhao, "From Shikumen to New-Style," 73.
300 Zhao, "From Shikumen to New-Style."
301 Bracken, *The Shanghai Alleyway House*.
302 Bracken, 113.
303 Chow, *Changing Chinese Cities*.
304 Renee Y. Chow, "In a Field of Party Walls: Drawing Shanghai's Lilong," *Journal of the Society of Architectural Historians* 73, no. 1 (March 1, 2014): 16–27, https://doi.org/10.1525/jsah.2014.73.1.16.
305 Lu, *Beyond the Neon Lights*, 142.
306 Chow, *Changing Chinese Cities*, 152.

United States of America.[307] As such, the spatial "distinctions between public and private are less sharply drawn [in the East] than in the West."[308] He (2013) additionally notes that the blurring of private and public spaces, a fluidity of spatial orders, are " virtually unknown in the West" because they are spatial and cultural traditions which have been practiced predominantly in Asia.[309] Peter Rowe proposes that the blurring of private, semi-private, semi-public, and public spatial realms has led to a "stronger social emphasis on commonality, propriety, and conformance."[310] The alley's subtle progression from private to public makes this author agree with Bracken (2013) and conclude that the alleyways appeared to "ideally suit [the] lifestyle" of the Chinese residents in the *lilong* communities.[311] This spatial and cultural traditions is what seemed to thrive within the *lilong* alleyways, especially after the population booms in Shanghai in the early twentieth century during the "golden age" of the *lilong* model.[312] As such, the alleyways not only acted as a "wonderful generator of social life"[313] for some of its residents, but they also responded to the Chinese cultural and spatial traditions of the period.

The designation of *lilong* spaces, each with differing degrees of privacy, was made possible through the specific layout of the *shikumen* units, which also directly "transformed the traffic routes into courtyard-like spaces."[314] These courtyard-like spaces reflected the transformation of the traditional layout of Chinese building complexes which followed a rigid demarcation of social, gender, and privacy hierarchal system.[315] The organization and spatial layout of *lilong* communities, however, were much more fluid than the traditional building layout, thus merging and blurring commercial and residential spaces; streets, courtyards, and alleyways.[316]

The fluidity and blurring between commercial and residential spaces were especially true for the shop-houses located on the perimeter of *lilong* compounds.[317] The shop-house units were almost identical to regular *shikumen* units; however, the shop-house did not have a yard in the main entrance.[318] As such, the living room of the shop-house was immediately accessible from the street side and made the living room a practical space used for business purposes[319] (Figures 3.25-3.26).[320] The shop-house is a clear example of how spatial orders and hierarchies were

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307 Bracken, *The Shanghai Alleyway House*.
308 Bracken, 8.
309 Bracken, 8.
310 Peter G. Rowe, *East Asia Modern: Shaping the Contemporary City* (London: Reaktion Books, 2005), 27.
311 Bracken, *The Shanghai Alleyway House*, 8.
312 Lu, *Beyond the Neon Lights*, 162.
313 Bracken, *The Shanghai Alleyway House*, 8.
314 Liang, “Where the Courtyard Meets the Street,” 491.
315 Bracken, *The Shanghai Alleyway House*; Knapp and Lo, *House Home Family*; Liang, “Where the Courtyard Meets the Street.”
316 Liang, “Where the Courtyard Meets the Street.”
317 Liang.
318 Lu, *Beyond the Neon Lights*.
319 Lu.
320 Lu.

changing radically during the late 1800's and early 1900's. Furthermore, entrances into courtesan houses were decorated with business signs similar to shop-houses; which further blurred the strict demarcation of social, gender, and privacy hierarchies typically seen in traditional Chinese residential and commercial spaces.[321] Samuel Y. Liang (2008) observes that "[t]his blatant commercial use of a monumental entrance in a residential compound testified to the fact that the traditional borderline between residences and commercial streets was melting away."[322]

The alleyways in the Late-Period *Lilong* models were another significant example of the fluidity of spaces new in Shanghai, not so much because they blurred the spaces between private and public, but because of their contradictions of spatial hierarchy according to traditional urban and residential morphology. In imperial China, the street and the courtyard were antithetical spaces to each other and were thus separated by walls.[323] As Liang (2008) writes,

> one represented the elite order and the other, the amorphous and vulgar; the one was the center and the other always was marginalized in Confucian ideology. Thus, the house-mansion-palace centered on the courtyard and the shop-along-the-street were two contrasting architectural types assigned to the central and marginal positions in the traditional urban geography.[324]

Despite the fact that the *shikumen* initially offered many of the traditional residential features, the houses became more compact, especially once *shikumen* units were subdivided and sublet to accommodate the increase in housing demand in Shanghai (Figure 3.34-3.35).[325]

As more people moved into the *lilong* communities, the alleyways, which were once "tranquil" spaces, became increasingly "disordered."[326] The disorganization came about because many residents began leaving water sinks and various other household items outside on the lanes due to limited space inside of their residences, which made the alleyways "messy and dirty."[327] Additionally, people began spending more and more time within the lanes, due to the limited amount of space allocated to each person inside of the house. The limited space inside of the *shikumen* units resulted from the subletting practices that took root in Shanghai to address the demand for housing.[328] As Lu (1999) affirms, the Housing Committee reported that it was common for a housing unit, which was designed for one family, to have been modified to accommodate an average of four families in 1937, and in some cases, as many as 15 families

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321 Liang, “Where the Courtyard Meets the Street.”
322 Liang, 491.
323 Liang, “Where the Courtyard Meets the Street.”
324 Liang, 491.
325 Lu, *Beyond the Neon Lights*. Please refer to previous chapters on the *lilong* typology for specific architectural details on the subdivision of residential units and the following sections for details regarding third-owners of sublet houses.
326 Yisan et al., *Shanghai Shikumen*, 91.
327 Yisan et al., 92.
328 Lu, *Beyond the Neon Lights*.

were housed at once.[329] As such, if housing was limited to only four families per dwelling, this allocated an average of 30 square feet or about 337 cubic feet per person within the typical two-story single-bay unit.[330]

In imperial China, the courtyards were the center point in traditional residences and occupied about 40 percent of the total housing area.[331] However, in the Late-Period *Lilong* style, the courtyards were too small to serve as outdoor living spaces, especially when housing units were subdivided and greatly overcrowed. The lack of available space resulted in many daily domestic and commercial tasks overflowing onto the alleys and streets; which stemmed the reversal of the *lilong* model in the traditional spatial hierarchy between streets and courtyards.[332] As expressed by Liang (2008), "the street became an infinitely extending space central to everyday life, while the house had to open itself to be a sustainable unit in the city." [333] For the sake of " spatial interconnectedness" between the city, streets, and houses, Liang (2008) claims that the essence and protection of the walled courtyard were sacrificed.[334] The overflowing of daily activities onto the lanes further illustrates the fluidity of spaces new to residential models in China, specifically as it relates to the actual use of spaces versus their intended use (Figures 3.12-3.26).[335]

Within the *lilong* compounds, one could see the lanes serving the residents and city in multiple ways responding to the important social, cultural, economic, political and architectural changes in Shanghai during the early nineteenth century.[336] It is important to understand the context of these changes, as it was during this significant historical period, that Shanghai was experiencing relatively stable and peaceful years leading to its economic, industrialization, and development efforts to thrive. These changes resulted in attracting more and more capital and people to Shanghai as some were anxious to invest in their future and maximize their profit.[337] Furthermore, it was then when one of China's first commodity mass housing model, the *lilong* typology, was developed through its various styles to reflect the changes stated above (Table 1.1).[338] Moreover, in the same fashion, the social and architectural development of the *lilong*

329 Lu.
330 Lu.
331 Liang, “Where the Courtyard Meets the Street”; Ronald G. Knapp, *China’s Old Dwellings* (Honolulu: University of Hawaii Press, 2000).
332 Liang, “Where the Courtyard Meets the Street”; Knapp, *China’s Old Dwellings*.
333 Liang, “Where the Courtyard Meets the Street,” 491.
334 Liang, 491.
335 Liang, “Where the Courtyard Meets the Street.”
336 Liang; Bracken, *The Shanghai Alleyway House*; Lu, *Beyond the Neon Lights*.
337 Lu, *Beyond the Neon Lights*.
338 Zhao, “From Shikumen to New-Style.” Please refer to the *lilong* typology chapter for specific details on the development of the *lilong* model.

model needs to be comprehended within the context of the demands of the real estate market.[339] Chunlan Zhao (2004) affirms that these primary factors are as follows:

- The "rise in small- and middle-sized families in the city's social demographic structure"[340]
- The "continuous rise in land value which led to an increase in house price for either purchase or rent"[341]
- The "fact that average households were not able to afford large-sized housing but needed smaller sizes. Therefore, two-bay and single-bay [*shikumen*] units became [more] popular [than the latest *lilong* types, such as Apartment and Garden Styles]" (Table 1.1).[342]

With these points in mind, the development of the social character of the *lilong* typology in the early nineteenth century is rather complex and influenced by many factors.[343] None of these can be studied alone and be separated from the other interdependent aspects; as such, this project does not address the particular significance of each element. Rather, the purpose of this chapter, is to describe the general way residents lived their lives within the *lilong* alleyways, independently of the factors which brought about the important transformations in Shanghai during the late 1800's and early 1900's.

3.3.3 ALLEYWAY-LIVING

The population growth and the resulting demands for affordable housing in Shanghai led to critical social changes within the *lilong* communities.[344] These were social changes which resulted from the intense use of the alleyway spaces due to the commercial and residential activities that overflowed onto the lanes.[345] The excessive use of the lanes eventually transformed the alleyway life into a "unique feature" of the *lilong* typology with many positive, yet unintended social benefits, especially for the growing rural-urban population in Shanghai.[346]

One of the most important features of the Late-Period *Lilong* style was the distinctive alleyway life, which became known by Shanghai locals by the popular nickname of "*long-tang*."[347]

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339 Zhao.
340 Zhao, 60.
341 Zhao, 60.
342 Zhao, 60. Please refer to the *lilong* typology chapter for specific details on the development of the *lilong* model.
343 Lu, *Beyond the Neon Lights*; Bracken, *The Shanghai Alleyway House*; Liang, "Where the Courtyard Meets the Street"; Zhao, "From Shikumen to New-Style."
344 Lu, *Beyond the Neon Lights*.
345 Lu.
346 Zhao, "From Shikumen to New-Style," 68.
347 Zhao, 68.

Zhao (2004) equates "*long-tang*"[348] to mean "alley (as the) living hall;"[349] and thus, "alley-living."[350] As stated above, the primary function of the lanes was to provide access to each residential unit within the *lilong* neighborhood.[351] As the densification of these compounds took place, the alleys became a form of "shared living room"[352] for the households. The residents of each house took over the sections of the lanes which were directly attached to their particular unit, in a way that made the alleyways a semi-public extension of the house.[353]

3.3.3.1 MIXING RESIDENTS

Lu (1999) refers to the wide range of the type of people who lived in *lilong* communities, as "shikumen mélange."[354] They were people from different walks of life and commonly varied in their occupation, age, gender, local origin, and so on (Table 3.1).[355] The typical single-bay, two-story alleyway residence housed an average of four families at a time and as many as 15 families, as stated previously.[356] This great mixture and overcrowding of residents was observed throughout Shanghai, but especially within Late-Period *Lilong* style compounds.[357] Before the mid-1950's, people in Shanghai "liked to move,"[358] thus adopting and becoming a form of urban "sojourners."[359] This desire to relocate frequently within the city made the people in Shanghai a bit different than their Chinese predecessors who lived in the same residence for generations.[360] According to a study of the dwellers of seven *lilong* neighborhoods, conducted in 1990, it was found that 87 percent of the residents (381 out of 438 inhabitants) had relocated at least one time before settling down at their current home.[361] The study also reported that 79 percent of the residents had been dwelling in the same house since the 1950's.[362] Additionally, more than half of that 79 percent of residents, had moved into those alleyway-houses in the early 1940s (Table 3.1).[363] The primary reason for the stability in residence since the mid-1950's was due partially to the "complex and bureaucratic nightmare" that changing one's residence entailed within the

348 Zhao, 68.
349 Zhao, 68.
350 Zhao, 68.
351 Chow, *Changing Chinese Cities*.
352 Zhao, "From Shikumen to New-Style," 68.
353 Arkaraprasertkul and Williams, "The Death and Life of Shanghai's Alleyway Houses–Re-Thinking Community and Historic Preservation."
354 Lu, *Beyond the Neon Lights*, 167.
355 Lu, *Beyond the Neon Lights*.
356 Lu.
357 Bracken, *The Shanghai Alleyway House*.
358 Lu, *Beyond the Neon Lights*, 222.
359 Liang, "Where the Courtyard Meets the Street," 494.
360 Lu, *Beyond the Neon Lights*; Liang, "Where the Courtyard Meets the Street."
361 Lu, *Beyond the Neon Lights*.
362 Lu.
363 Lu.

limitations imposed by the *hukou* system.[364] Moving also became hectic and expensive in Shanghai since the city had a limited supply of affordable units.[365] However, this eclectic group of dwellers could easily describe the residential mixture of any of the *lilong* neighborhoods in Shanghai in the early twentieth century.[366]

3.3.3.2 MIXING COMMERCIAL AND RESIDENTIAL

Alleyway-living was unique due to the high variety in the social composition of the *lilong* residents (occupation, age, social class, local origin, dialects spoken, etc.).[367] The "shikumen mélange,"[368] was also distinctive because of the coexistence and blurring of the residential and commercial models that took place in this typology.[369] The distinguishing functional flexibility of *shikumen* units was observed primarily in the shop-house units.[370] Within a *lilong* neighborhood, shop-houses were located in the front row of houses (or several front rows, in some cases), which faced the street around the perimeter of the compound, framing and protecting the *lilong* community from the rest of the city (Figures 3.8, 3.27-3.28, 3.36-3.37).[371] Shop-houses were primarily utilized for business purposes; thus, providing its shrewd dwellers a potential place of employment, combined with a place to live in, for almost the same amount of rent as a regular *shikumen* unit in the interior of a *lilong* neighborhood.[372] As Bracken (2013) and Lu (1995) assert, typical *lilong* compounds were in essence, "self-contained units, microcosms of the city where residents could cater to virtually all their daily needs and all within a few steps of home, which meant they did not have to cross busy main streets."[373] As such, for example, many of the vegetables washed and cooked in the alleyways were likely purchased in the neighborhood shop-houses (Figures 3.8, 3.12-3.16, 3.26, 3.32).[374]

There were many types of businesses that ran within *lilong* shop-houses in the early 1900's.[375] The residents in Shanghai were so familiar with this type of hybrid (business and residential) model that "alley-store" (*longtang shangdian*), "alley-factory" (*longtang gongchang*), and "alley-school" (*longtang xuetang*) were standard Shanghainese terms.[376] Contrary to the

364 Lu, 124.
365 Lu, *Beyond the Neon Lights*.
366 Lu.
367 Liang, “Where the Courtyard Meets the Street.”
368 Lu, *Beyond the Neon Lights*, 167.
369 Liang, “Where the Courtyard Meets the Street.”
370 Lu, *Beyond the Neon Lights*.
371 Lu; Liang, “Where the Courtyard Meets the Street”; Hanchao Lu, “Away from Nanking Road: Small Stores and Neighborhood Life in Modern Shanghai,” *The Journal of Asian Studies* 54, no. 1 (1995): 93–123, https://doi.org/10.2307/2058952; Bracken, *The Shanghai Alleyway House*.
372 Lu, *Beyond the Neon Lights*.
373 Bracken, *The Shanghai Alleyway House*, 94. Refer to Lu, 1995, pg. 96 for greater details.
374 Lu, *Beyond the Neon Lights*.
375 Liang, “Where the Courtyard Meets the Street.”
376 Lu, *Beyond the Neon Lights*, 173.

housing units inside of the *lilong* compound, the shop-houses did not have a front courtyard and one could enter the living room directly from the street.[377] The living rooms were then used for commercial purposes rather than for housing, while the remainder of the house was used as a regular residential unit (Figures 3.8, 3.27-3.28, 3.36-3.37).[378] Despite the common use of periphery *shikumen* units utilized for business purposes, this was not a requirement. Furthermore, many shop-houses were modified as needed to best suit the function and spatial requirements of the business ran within those spaces.[379] Walls were frequently torn down to create larger spaces within the same unit or within side-by-side houses to create even larger spaces.[380] In the same way, makeshift walls were added to divide and subdivide rooms.[381] Many shop-houses were additionally "traversable;" accessible to shoppers from both the inside and outside of the compound and one could easily avoid walking around to the main *lilong* entrance and cut through a store into the *lilong* compound.[382]

The variety of shop-houses was astounding; within a standard *lilong* neighborhood, one could find stores such as rice stores, coal stores, tobacco-paper stores, hot water stores, "tiger stoves" (*laohuzao*) and sesame-cake stores (Table 3.2).[383] Factories, such as little textile mills, which operated day and night and employed both men and women, could be found in *lilong* communities as well, despite the noise from the machines and the workers.[384] Many local elementary schools and higher education institutions, such as Datong University, one of Shanghai's first Chinese-run private universities, could be commonly situated in a *shikumen* compound.[385] Dormitories for factories and schools, along with pawnshops, hotels, and bank enterprises could be found in alleyway-houses as well.[386] Adult entertainment establishments such as opium dens, brothels, and gambling houses could additionally be found in alleyway-houses (Figures 3.7, 3.12).[387] Law offices, clinics, workshops, public bathhouses, and even Buddhist temples could also be found in the alleys. Furthermore, the *lilong* neighborhoods were key to the development of the Chinese Communist Party. Lu (1999) affirms that the Communists drew little attention when operating out of the *lilong* neighborhoods because of the coexistence of diverse businesses that ran side-by-side and people from all kinds of walks of life living

377 Arkaraprasertkul and Williams, “The Death and Life of Shanghai’s Alleyway Houses–Re-Thinking Community and Historic Preservation.”
378 Lu, *Beyond the Neon Lights*.
379 Lu.
380 Lu.
381 Lu.
382 Liang, “Where the Courtyard Meets the Street.”
383 Lu, “Away from Nanking Road.”
384 Lu.
385 Lu.
386 Lu.
387 Liang, “Where the Courtyard Meets the Street.”

together.[388] As such, the First, Second, and Fourth National Congress of the Chinese Communist Party took place within a *lilong* community.[389]

Along "cultural streets," such as Fuzhou Road, printing houses and bookstores could be found.[390] In the Neishan Book Store in Hangkou, for instance, famed by Shanghai's well-known writer, Lu Xun, the house owner removed the wall between the two front courtyards of two adjacent housing units, along with the wall separating the two living rooms. He then added a glass roof over the courtyards to maximize natural lighting and he similarly managed the bookstore as a Barnes and Noble bookstore. This innovative use of space and materials speaks of the design potential of the *shikumen* unit, even when the fundamental modular unit is identical and repetitive throughout the compound.

Samuel Y. Liang (2008) refers to the *lilong* housing compound as the "*li.*"[391] He argues that the *li* "entailed a radical reconfiguration of traditional residential and commercial spaces in which visibility and openness replaced walls and containment, the traditional spatial order and hierarchy were subverted, and the borderline between the elite and the lower class was transgressed as well as redefined."[392] Bracken (2013) supports Liang's claim by adding that this exact subversion is what "made Shanghai so special: its dynamism."[393] Liang (2008)m further notes that "the *shikumen* did not separate the residential compound from the street but instead defined different commercial spaces."[394] Spaces were defined by the *shikumen;* outlining the interior of commercial spaces, and identifying the spaces outside of the *shikumen* boundaries by outlining potential entrepreneurial opportunities outside of those units. This scenario was exemplified by the peddlers conducting dealings and producing wealth by any means necessary within the *lilong* alleyways despite the competing, more official, businesses in nearby shop-houses on the perimeter of the compound.

Shop-houses were in essence, functionally flexible spaces similar to the alleyways themselves in *lilong* compounds. Since shop-houses offered the potential of a consistent flow of income for the residents, the "sojourners' concept of home had to be reinvented"[395] in order to maintain their expensive urban lifestyles in Shanghai. As Liang (2008) further explains, "extremely diverse functions—residential and commercial, private and public—were found in the *li* compounds."[396] Not only this same form of extreme diversity could be found in the type of businesses held in the shop-houses but extreme diversity was also found in the social

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388 Lu, *Beyond the Neon Lights*.
389 Lu.
390 Lu, 175.
391 Liang, “Where the Courtyard Meets the Street,” 84.
392 Liang, 84.
393 Bracken, *The Shanghai Alleyway House*, 95.
394 Liang, “Where the Courtyard Meets the Street,” 494.
395 Liang, 494.
396 Liang, 494.

composition of the *lilong* residents. For those residents who had the financial resources and "liked to move" as well, they could freely relocate to any part of Shanghai that housed their favorite shop-houses and alley-living lifestyles. As Jeffrey N. Wasserstrom bragged in the place of these elite "urbanites,"[397] "[i]t mattered little that this might require them to cross the border between administrative districts (borders that were policed only in rare times of crisis) and that it might mean entering or leaving the walled city."[398] In doing so, residents had the potential to redefine their personal "self-contained units"[399] and "microcosms of [their] city,"[400] time and time again.

3.3.3.3 "LITTLE CRAZES"

Alley-living was especially enticing for peddlers since the majority of them hawked their products from lane to lane every single day within *lilong* neighborhoods.[401] This is especially important because during the early nineteenth century when the vast majority of the Chinese population in Shanghai resided within a *lilong* community;[402] hence, peddlers went to where their customers were: the alleyways.[403]

Children and elderly, as well as adults, found great pleasure in the enchantment provided by "little crazes"[404] (*xiaorehun*); a nickname for the popular and quite talented hawking peddlers who integrated free entertainment with their business.[405] "Little crazes"[406] were street peddlers who sang songs or performed street shows to advertise their merchandise and various edibles to reflect the "rhythm of the seasons as well as of the day."[407] In an unpublished memoir of George Wang (as cited in Lu 1999), he recalls listening eagerly to a peddler story-teller almost every single night when he was eight or nine years old:

> This man talked in Shanghai dialect, suiting his voice and hand gestures to each character in turn, and periodically rapping a small block of wood on his table to draw the audience's attention. Like the puppeteer, he used vocal sound effects to represent a galloping horse or the boom of a cannon, but he did them much better. When he came to the sexy part of a story, his voice changed. In low, mysterious tones, he described every detail, every movement, and this always caused laughter in the audience. I didn't always understand what he said or what he meant, and I was too busy listening to turn around

397 Lu, *Beyond the Neon Lights*, 167.
398 Jeffrey N. Wasserstrom, *Global Shanghai, 1850–2010* (London ; New York: Routledge, 2009), 41.
399 Bracken, *The Shanghai Alleyway House*, 94.
400 Bracken, 94.
401 Lu, *Beyond the Neon Lights*.
402 Bracken, *The Shanghai Alleyway House*.
403 Lu, *Beyond the Neon Lights*.
404 Lu, 204.
405 Lu, *Beyond the Neon Lights*.
406 Lu, 204.
407 Lu, 200.

> and look at [the audience], but their enjoyment was clear. Then, when the story reached a really exciting point, we knew what he would say: 'If you want to know what happened, listen to the next chapter. But first, let me invite you to taste my ligao tang.' And he would open his box and bring out his pear syrup candy to sell.[408]

Sales tactics such as this one worked well for an engaged audience since the candies sold well. As a daily treat, many residents waited and purchased peddler goods actively, in exchange for a bit of history, literature, and cultural exposure.

Selling snacks was the most common enterprise within the *lilong* alleyways.[409] However, peddlers also took their services and commodities into the alleyways, circulating through them selling a wide range of products.[410] For example, peddlers sold newspapers, fresh vegetables, soap, cigarettes, mats, flowers, rice, socks, salt, needles, thread, handkerchiefs, bamboo poles (to hang clothes on to dry), toys, and many other necessary and convenient items.[411] Barber stands were additionally included amongst the most common sights in *lilong* lanes or street corners offering discounted prices, usually 25-30 percent less than a regular barber shop to ensure a fairly consistent clientele(Figures 3.15-3.16).[412] Travelling libraries could also be found within the roofed entrances of *lilong* alleyways and were especially appealing to children.[413] Many adults enjoyed these libraries as well as some of the readings provided readers an introduction to the rest of the world; its literature, history, and culture (Figure 3.13).[414] Dress makers were similarly regular vendors in the alleyways. However, except needlework which was an occupation exclusive to women, most of the other services provided in the *lilong* communities were conducted by men. Similar to the "little crazes," these peddlers also had their catchy songs to draw people's attention while praising the quality of their goods and services.[415]

As Lu (1999) asserts, "[t]hese artisans were an indispensable part of the life of the city"[416] and by circulating through their regular routes in *lilong* neighborhoods, they formed an important part of the social fabric that helped bring people together.[417] Furthermore, as innovative entrepreneurs, "little crazes" and peddlers were centers of information and resources.[418] Not only did they know many of the residents throughout the compounds because they sold their products every single day throughout the same areas but they also offered opportunities for engagement

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408 Lu, 205.
409 Liang, “Where the Courtyard Meets the Street.”
410 Yisan et al., *Shanghai Shikumen*.
411 Yisan et al.
412 Lu, *Beyond the Neon Lights*.
413 Yisan et al., *Shanghai Shikumen*.
414 Lu, *Beyond the Neon Lights*.
415 Lu.
416 Lu, 214.
417 Lu, *Beyond the Neon Lights*.
418 Lu.

and socialization.[419] The mere repetition of daily activities and physical proximity tended to create diverse opportunities for peddlers and residents to network and socialize with one another.[420]

3.3.3.4 "SHIKUMEN MÉLANGE"

Alleyway-living was a form of life where, in Zhao's (2004) words, "[e]very one could see and be seen by others, as if the city were one busy street."[421] Alley-living allowed the *lilong* dwellers a space where they could chat and greet others; where peddlers could engage in entrepreneurial endeavors; where the elderly could play chess matches; where women could do their laundry; and where children could also play games.[422] These are only a few of the many activities that the "shikumen milange" engaged in within the alleway spaces (Figures 3.8-3.9).[423] As Shanghai globalized further, the alleyways and the activities which took place within them adapted over the decades to the demands of the new urban lifestyle that Shanghai offered, as they still do today.[424]

Lu (1999) asserts that the following three elements must be taken into account in any discussion about the relationships between the residents of the over-congested and over-concentrated *lilong* neighborhoods in Shanghai: The *baojia* system, "a failed attempt of the government to interject itself into neighborhood life;" the "ad hoc and sporadic citizen organizations," mainly for rent-negotiating purposes; and the "spontaneous and multifarious reactions of one human to another - in order words, conventional human congeniality and discord among neighbors."[425] The first two points were "brief and feeble" as mentioned by Lu (1999).[426] However, he emphasizes that it was the third element that was made up the "quotidian aspects of life and made up 'politics' understood by the people themselves."[427] An objective observation by Lu (1999), since the human being is a complex and multifaceted social being, especially within an overcrowded environment, which is precisely to what the development of alley-living was responding.[428]

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419 Lu.
420 Lu.
421 Liang, “Where the Courtyard Meets the Street,” 493.
422 Lu, *Beyond the Neon Lights*.
423 Lu, 167.
424 Zhao, “From Shikumen to New-Style.”
425 Lu, *Beyond the Neon Lights*, 218.
426 Lu, 218.
427 Lu, 218.
428 Maslow, *Hierarchy of Needs*; Lu, *Beyond the Neon Lights*.

3.3.3.4.1 "Heaven is high and the emperor is far away."

Political control from the national capital down to the neighborhoods where the average person dwelled has been a goal for centuries for the Chinese government.[429] The *baojia* system, which was established in Shanghai as early as 1648 during the Qing dynasty (1644-1911), was a system of "neighborhood watch and mutual responsibility."[430] In 1927, when Shanghai became a special municipality, the *baojia* was modified to demonstrate that the Chinese could govern a modern city and the proposal identified a three-layered neighborhood categorization under district (*qu*) administration:

- Five households (*hu*) = one basic neighborhood unit (*lin*)[431]
- Five *lin* = one *lü*[432]
- Twenty *lü* = one *fang*[433]

As such, when an average household contained eight members, a municipality of 1 million residents could be organized in the following way as Lu (1999) explains it: "1,000,000 people = 125,000 *hu* = 25,000 lin = 5,000 *lu* = 250 *fang* = 25 *qu*."[434] Despite its long history and application nationwide in 1934, the *baojia* system as implemented by the Chinese state was only a "mere formality" throughout China.[435] However, this lack of organizational success was due to the complexity of implementing such a comprehensive system of social control, but also because of the fighting taking place between China and Japan during the 1930's.[436]

During the Japanese occupation of China (1938-1945) was the only time that, as Lu (1999) reports, when the average Shanghai resident felt that the *baojia* system (wartime *baojia*) was a part of their lives.[437] The wartime *baojia* was a "built system of mutual responsibility (*lianbao lianzuo*) among residents to prevent expressions of anti-Japanese sentiment and anti-Japanese activities."[438] Within the Japanese *baojia,* the state did not necessarily define a "household" as natural (biological) family, but rather a "household" could be "a bunch of families who lived together in the same house."[439] The Japanese government appeared to find futile to define household units by nuclear families and they often included all of the residents of an

429 Lu, *Beyond the Neon Lights*.
430 Lu, 218.
431 Lu, *Beyond the Neon Lights*.
432 Lu.
433 Lu.
434 Lu, 218.
435 Lu, 218.
436 Lu, *Beyond the Neon Lights*.
437 Lu.
438 Lu, 219.
439 Lu, 219.

alleyway house, assigning the landlord or second landlord as the registered head of household (*huzhang*) for his tenants.[440]

This form of social control came handy for situations when a "crime" was committed against a Japanese individual; the head of the household was held accountable for the crime, and all of the neighbors within the household became a part of the process as well.[441] Most people, however, only cared about the *baojia* when it came to the rationing of food grain which began in 1942, despite the fact that the system was also utilized to designate community services and to levy taxes.[442] This lack of appreciation for the social order offered by the *baojia* could be because the system was imposed by force in China by the Japanese.[443] As such, the system came to a virtual standstill in 1945 finding a widespread indifference and abuse of the *baojia* responsibilities, combined with the corruption of *baojia* personnel.[444] By the time the Communists were in command within China, the *baojia* system had existed only in paper.[445] However, on May 3, 1949, the Communists publicly acknowledged the usefulness of the *baojia* system, and by 1955, a nationwide three-level neighborhood organization scheme was established (from the top-down: the street office, the residents' committee, and the resident's group).[446]

Before the Communist era, most *lilong* residents did not feel a significant Chinese state presence in their lives and neighborhoods.[447] Aged and longtime Shanghai *lilong* residents used an old Chinese saying to describe life in *lilong* communities before Liberation: "Heaven is high and the emperor is far away" (*Tian gao huangdi yuan*).[448] The lack of residents' perception of state involvement in Shanghai's *lilong* neighborhoods was not because the areas were entirely exempt and divorced from Chinese government rule and politics. Instead, this perspective is better explained as a result of "impotence of, rather than absence of, governmental intervention."[449] However, within the concessions (the International Settlement and the French Concession), the government had meticulous details outlining the regulations for the construction and maintenance of residences.[450] This was a form of government control over the people that was not felt by the average *lilong* resident since adhering to those codes was understood to be part of the business and practice of the builders and real-estate developers.[451] Many *lilong*

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440 Lu, *Beyond the Neon Lights*. The topic of second landlords and subletting is covered later in this chapter.
441 Lu, 220.
442 Lu, *Beyond the Neon Lights*.
443 Lu.
444 Lu.
445 Lu.
446 Lu.
447 Lu.
448 Lu, 221.
449 Lu, 222.
450 Lu, *Beyond the Neon Lights*.
451 Lu.

inhabitants did not even know about these legal stipulations, leading them to feel that life was free of state intervention within their neighborhoods.[452]

3.3.3.4.2 "May you become a second landlord this year!"

"If you want to know who are the most scheming people in Shanghai, they are the second landlords."[453] The previous is a comment made by a journalist which may have represented the general attitude of dwellers in Shanghai towards "second landlords."[454] Second landlords were even excoriated by a few "indignant intellectuals" for being an "exploiting class."[455] Controlling an estimated 99 percent of rentals in working-class neighborhoods in Shanghai, the second landlords were without a doubt, major players in the real-estate industry by the 1920's.[456] This is better illustrated by the report of a real-state reporter in Shanghai, during the early 1930's: "the biggest creditors in the market are the landlords, and the most serious debts are rents. In our people's daily life, the number one expense is rent for housing."[457] However, to the common people, the second landlords were the biggest creditors, rather than the house owners.[458] Despite the fact that the general public "grudgingly accepted" the second landlords, money still had to be made and becoming a second landlord was still a desirable financial aspiration for most people. While wishing each other prosperity during the New Year, friends and family offered one another the common felicitation of "May you become a second landlord this year!"[459]

Within a compartmentalized *shikumen* residence, the owner of a house was called the "big landlord" (*da fangdong*).[460] The tenant who rented the dwelling from the owner, yet sublet the individual house rooms, was commonly known as a "second landlord" (*er fangdong*).[461] The tenant that rented a room from the second landlord was referred to as a "third tenant" (Table 3.3).[462] As long as the rent was paid to the house owner, there was little interaction between the owner and the tenants.[463]

The exceptional circumstances which surrounded the city of Shanghai as a treaty port led to the lack of legal clarity surrounding home ownership within the foreign settlement.[464] Only

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452 Lu.
453 Lu, 166.
454 Lu, *Beyond the Neon Lights*.
455 Lu, 167.
456 Lu, 166.
457 Lu, 166.
458 Lu, *Beyond the Neon Lights*.
459 Lu, 167.
460 Lu, 163.
461 Lu, 160.
462 Lu, 163.
463 Lu, *Beyond the Neon Lights*.
464 Lu.

foreigners were permitted to hold land titles before 1890.[465] This law was later abolished, yet many Chinese investors still preferred to go through a foreign registrant for their house purchasing needs.[466] Which means that a Chinese person would register their house under the name of a foreign registrant to avoid the "corruption and legal ambiguities that frequently occurred under the Chinese authorities."[467] As such, a *shikumen* residence in a *lilong* community would often have two owners: 1) the registered foreign owner in whose name the title deed was issued to; and 2) the "beneficial owner," the real house owner who was Chinese.[468] Furthermore, the wars that occurred in Shanghai in the early 1900's led a significant increase in population in Shanghai, thus increasing the demand for housing, causing the subletting business to boom even further, resulting in some third tenants to sublet their house room.[469]

The takeover fee and the lack of homeowner interference were two significant reasons for the need to sublet.[470] The takeover fee legitimized the second landlords' "exploitative practices" of their tenants.[471] As a renting requirement, the takeover fee originally was a "compensation paid by a new tenant to a previous tenant who had left some fixtures or furniture in the house."[472] The fee was voluntary in the beginning, but by the 1920's it had changed and became a non-refundable and standard rental charge.[473] In the early 1930's, the takeover fee was equal to about two to three months' rent, and by the early 1940's it was close to the purchasing price of the house.[474] As such, the rent charged by a shrewd tenant was not merely a portion of their total rent due to the house owner, but instead, rents collected by second landlords were seen as a form of profit.[475] In other words, second landlords charged third tenants more than what they needed to pay the house owner their portion of the rent. The excess amount of rent collected was intended to help them recuperate the takeover fee initially paid or invested, as well as provide a stable form of income for the second landlords.[476] Opportunities for profit were also high in the case of second landlords of shop-houses since they had the chance to work and live within the unit, on top of the potential to sublet the rest of their house for an additional source of income.

On average, a shop assistant or a factory worker would pay 20 to 40 percent of their paycheck to rent a pavilion room, a loft, or a kitchen of about 108 square feet where their whole family would live.[477] Quite often, people would pay 70 percent or more of an average monthly

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465 Lu.
466 Lu.
467 Lu, 164.
468 Lu, 164.
469 Lu, *Beyond the Neon Lights*.
470 Lu.
471 Lu, 167.
472 Lu, 163.
473 Lu, *Beyond the Neon Lights*.
474 Lu.
475 Lu.
476 Lu.
477 Lu.

income to rent a room within the *lilong* neighborhoods.[478] This common practice is showcased in the interaction between Suzhou native Bao Tianxiao, a well-known writer and journalist in 1906, and an old lady who was the second landlord of the house with the room for rent that he was looking to lease:

> She said, "We like a quiet life. Tenants with a big family would bring bustle and we would decline them. You, sir, are an intellectual, and you are a native of Suzhou. I therefore would not ask for an unfair price– the monthly rent is $7." I agreed with the rent immediately. I pad $2 as a deposit and asked them to remove the "for rent" notice right away.[479]

An average worker in one of the four mayor mills in Shanghai in 1906 earned anywhere from $7.50 to $10.00 each month.[480] Regardless, Mr. Tianxiao considered the $7.00 rent "reasonable," especially when taking into account the fact that he received special consideration for being from the same hometown as that of the second landlord's in-law.[481]

Overall, second landlords were "no more than a group of 'little urbanites' (*xiaoshimin*) who sacrificed the comfort of their homes to offset some of their rent, supplement the family income, or make a living."[482] Furthermore, "there was no clear line of class or social rank dividing these landlords and their tenants."[483] Independently of these facts, paying such a high percentage of one's income in rent to a second landlord whom very likely were perceived by tenants as scheming people, subletting primarily to increase their profit at the expense of the tenants and which led to many disagreements and tension between second landlords and their tenants. As such, the second landlords were a disliked but unavoidable entity in the lives of most *lilong* residents.[484]

3.3.3.4.3 "Neighbors are better than relatives."

"The charm of any city lies in its dwellers. Without the residents, men or women, old or young, *Shikumen* houses would be constructions without soul," reflects Ruan Yisan (2011).[485] In a "city of migrants," which is what Shanghai was in the early twentieth century, people relocated to it from all over China, leaving behind their families and social networks.[486] As such, for migrants new to the city, it was imperative to establish a strong support group that could meet

478 Lu.
479 Lu, 161.
480 Lu, *Beyond the Neon Lights*.
481 Lu, 161.
482 Lu, 167.
483 Lu, 167.
484 Lu, *Beyond the Neon Lights*.
485 Yisan et al., *Shanghai Shikumen*, 124.
486 Yisan et al., 134.

their needs for association and collaboration, as well as for socialization purposes.[487] The particular architectural organization of the *lilong* model and the increase in population in Shanghai during the early 1900's, were two factors that contributed to the provision of a platform in which a migrant's "much [*sic*] needed sense of safety and intimacy," could be met.[488] One could argue that this has continued to be the case for Shanghai's *lilong* communities for over a century now.[489]

During the mid-1940's, a period in Shanghai's history during which the city "flourished best,"[490] *lilong* communities were packed with residents from all over China, each with different backgrounds and walks of life.[491] Young and old, poor and rich, male and female, and everything in between, came together in the lively and, at times, chaotic *lilong* communities.[492] As Lu (1999) concludes, "[i]t was precisely the differences among these people (whether differences in class, occupation, local origin, or anything else) and the similarity of their residences that characterized Shanghai's alleyway-house neighborhoods."[493]

3.3.3.4.3.1 Evening chats, romances, and squabbles

By redefining one's own "microcosms of the city" and by merely moving to another *lilong* neighborhood, as Wasserstrom (2009) emphasizes, one could then reconstruct one's own alleyway-living experience.[494] As such, to an extent, one could reconfigure the mixture of residents with which one had evening chats, romances, and squabbles with.

When the *lilong* housing units were compartmentalized and sublet during the early 1900's, the physical proximity and ease of access to one another led to more opportunities for interaction between the *lilong* residents.[495] Being so physically close to each other also led to a general lack of privacy experienced by the dwellers; few secrets were kept, and infringements of privacy were consistently overlooked.[496] Consequently, the likelihood of intense relationships increased as well. For good or for bad, alleyway-living led to the formation of "big family[-like]" relationships among its residents.[497] Sometimes one developed very close, intimate, and positive

487 Yisan et al., *Shanghai Shikumen*.
488 Yisan et al., 135.
489 Yisan et al., *Shanghai Shikumen*; Liang, “Where the Courtyard Meets the Street”; Chow, *Changing Chinese Cities*; Zhao, “From Shikumen to New-Style”; Bracken, *The Shanghai Alleyway House*.
490 Lu, *Beyond the Neon Lights*, 166.
491 Lu, 167.
492 Lu, 166.
493 Lu, 167.
494 Bracken, *The Shanghai Alleyway House*; Wasserstrom, *Global Shanghai, 1850–2010*.
495 Lu, *Beyond the Neon Lights*.
496 Lu.
497 Yisan et al., *Shanghai Shikumen*, 128.

relationships with "siblings."[498] At other times, one did not even bother to say "hello" to their "brother" or "sister."[499] Overall as Lu (1999) explains, "[t]he sorrows and joys of any family were shared with the neighbors."[500]

Due to the density, mix of resident type, and the mixed zoning practices commonly seen in *lilong* compounds, the alleyways tended to be bustling, full of activity all day long and during all seasons of the year.[501] Founder of modern cartooning in China, Feng Zikai, captured the essence of alley-living in some common activities that overflowed into the alleys from residential and commercial units (Figure 3.16).[502] A typical alley-living day began in the early hours of the morning with cries from night stool-men; "Bring out your nightstools!" [503] The night stool cart was provided by municipal regulation for the Late-Period *Lilong* models because the alleyway houses did not have private sanitary fixtures installed in each housing unit. As such, the compound provided public lavatories inside of the alleys.[504]

Once the day got going, peddlers and vendors could be found in the alleyways and inside shop-houses offering quick and delicious breakfast options for the *lilong* residents.[505] As cited in Zhao (2004), literati Mu Mutian uniquely recorded a morning perspective of alley-living in one of his essays:

> After you wake up the next morning, you feel in another world. Looking out from the rear door, you will find one or two red-paint night-stalls lying outside each house. Vegetable sellers are wandering in the alley. Housewives or female servants are bargaining with peddlers *[sic]* in a rather flirting way.[506]

As residents headed off to work, young students also headed off to school.[507] By eight or nine o'clock in the morning, the daily chores started; doing the laundry, washing vegetables, cooking, and cleaning.[508] In sunny days, the elderly gathered to sit in the sun relaxing, chatting, and playing cards with one another (Figures 3.18, 3.23).[509] After lunch, the neighborhood settled down while a few people take a nap.[510] The quiet of the compound, which was appreciated by writers seeking inspiration during the day, lasted until three or four in the afternoon when children

498 Lu, *Beyond the Neon Lights*.
499 Lu.
500 Lu, 230.
501 Lu, 232.
502 Lu, *Beyond the Neon Lights*.
503 Lu, 193.
504 Lu, *Beyond the Neon Lights*.
505 Yisan et al., *Shanghai Shikumen*.
506 Zhao, “From Shikumen to New-Style,” 68.
507 Yisan et al., *Shanghai Shikumen*.
508 Yisan et al.
509 Yisan et al.
510 Yisan et al.

returned from school (Figures 3.25-3.26).[511] The cries of peddlers were guaranteed to wake up the community for their afternoon snacks; "osmanthus sugar taro!"[512]

Alley-living was especially attractive to some people because it was convenient and made them happy.[513] As cited in Zhao (2004), local writer, Shen Shanzeng, admits that alley-living can be very engaging to certain people, such as children and the elderly, who seem to enjoy the blurred and rather intimate living pattern of the *lilong* communities:

> But to children and elders, . . . the *lilong* is an ideal place. Compared to those fully-equipped 'children's palaces' and 'elderly homes', the blankness of alley space in the *lilong* allows its participants to make full use of their imaginations with much fewer constraints. A child enjoys no less happiness in playing with his toy gun with his fellows after school than from an amusement park. An elder obtains no less joy by chatting in the alley than by going to a teahouse. *Lilong* life becomes poetic because of the creativeness of the children and the elders.[514]

For many residents, children and elders made *lilong* life quite enjoyable as they did their daily chores in the alleys and watched children and elderly play and laugh with one another.[515]

By six in the evening, the men had returned from their jobs; families had been fed; dinner dishes had been washed; and people found themselves in the lanes "enjoying the coolness"[516] of summer evenings together.[517] They relaxed, socialized, played instruments, sung, drank, and snacked together (Figures 3.9-3.10, 3.18-3.20).[518] As Lu (1999) shares, "[t]hese were the 'happy hours' of the alleyway, when neighbors told stories, exchanged gossip, discussed news or current affairs, and got to know each other."[519] Writer Mao Dun, who lived in a *lilong* community in the late 1920's, remembers that "after supper, neighbors in the alley all came out to enjoy the cool outdoors: men and women, elders and children, laughs and cries, all came together to make a great bustle."[520] In a similar fashion to Mao Dun, Lu Xun, who wrote in the evenings while living in an alleyway house in the 1930's captures alleyway-living in the following way, as he cited (1999):

> It is said that the hot weather this year in Shanghai has broken a sixty-year record. In the day time I went out to make a living. Lowering my head, I came back home in the evening. But the room was hot, and there were mosquitoes. At that time, the only paradise was outdoors. Perhaps because Shanghai is on the ocean there is always a

511 Lu, *Beyond the Neon Lights*.
512 Yisan et al., *Shanghai Shikumen*, 130.
513 Zhao, "From Shikumen to New-Style."
514 Zhao, 70.
515 Lu, *Beyond the Neon Lights*.
516 Lu, 230.
517 Yisan et al., *Shanghai Shikumen*.
518 Lu, *Beyond the Neon Lights*.
519 Lu, 230.
520 Lu, 231.

> breeze, and I did not have to fan myself. People who lived in the lofts or pavilion rooms nearby came out of their rooms and sat outside. These neighbors knew each other a little but did not see each other often. Some of the neighbors were shop assistants, some were proofreaders in publishing houses, an some were skilled workers who were really good at drafting. Tired out by their daily work, they were complaining. But anyhow, this was a time of leisure, so neighbors were also chatting. The topics of the chats were by no means narrow, but included the drought, prayers for rain, the flirt, the [so called] three-inch dwarf, exposed thighs, as well as ancient Chinese prose, vernacular, the language of masses.[521]

Evening chats like these were common in the alleyway-house neighborhoods. Another writer, as cited by Lu (1999), described the alleyway life in the summer evenings almost identically to Lu Xun's, as such:

> The sun was gradually setting in the west, and an evening breeze flowed through the alleyways. This was a time when poor people could enjoy their life a bit. Men wearing only shorts came out of their homes in the third loft or pavilion room and sat in the alleyway with a palm-leaf fan in hand. The Eldest of the Back Room, the Grandma of the Kitchen, and others came out too. Having gathered, the Eldest, together with Number Three and Number Four, started their great chat. Their topics could include, on the top, the Jade God sending his assistant god down to the world for the salvation of all moral life; in the middle, how General Chen Jitang's plane had crashed; and, at the bottom, gossip about a domestic maid of a family in the neighborhood who was meeting the chauffeur of another family in a hotel room.[522]

Please take note of the casual manner in which the writer refers to his neighbor, "The Eldest of the Back Room,"[523] instead of using a given or family name.

"Enjoying the coolness"[524] in the evenings was also a time for romance and young lovers to court one another.[525] As writers above commented in their descriptions of evening chats, this was the time to gossip about the latest love affairs.[526] The density of residents in *lilong* compounds, in the early 1900's, did not allow for love affairs and adultery to be kept private and a secret for long.[527] As Lu (1999) adds, "[i]ndeed, it sometimes seemed that what these "little

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521 Lu, 231.
522 Lu, 231.
523 Lu, 231. The casual reference to one's neighbors is covered in more detail in the following section regarding the residents' general sense of community.
524 Lu, 230.
525 Yisan et al., *Shanghai Shikumen*.
526 Bracken, *The Shanghai Alleyway House*.
527 Lu, *Beyond the Neon Lights*.

urbanites"[528] (*xiaoshimin*) enjoyed most of all was uncovering sexual affairs among their neighbors."[529] Lu (1999) refers to Shanghai *lilong* residents as "little urbanites" here.[530] For people with enough resources, *shikumen* units were ideal places to discretely house one's mistress, commonly known as a "little wife," by leasing her a "little house." A "little house" which could be only one room in a house, or a large residence with rooms to house a multigenerational family comfortably. During the 1920's, a Shanghai "bamboo branch poem"[531] (*zhuzhici, an* occasional poem about local topics) the author describes the crowded character of "lower-middle-class"[532] neighborhoods in Shanghai as follows:

> A small house of a half rafter shared by numerous families
>
> - as if a thousand hooves form a crowd.
>
> This is the most incredible thing:
>
> You wake up from an idle dream in the middle of the night,
>
> only to hear neighbors' moans of ecstasy -
>
> to the ear, it is simply intolerable.[533]

Lu (1999) qualifies, as the poem was followed by an annotation from the writer:

> [In an average home in Shanghai] even the hallway and kitchen were full of people. Such living arrangements were sure economic, but day and night neighbors touch each other's hands and feet. In this extremely jammed situation, a little infringement of privacy or a breach of etiquette would not be seen as a fault.[534]

Heppner's description of alleyway-house living, as cited by Lu (1999), supports further the above bamboo branch poem's sentiment:

> The walls were paper thin, and you whispered unless you wanted the whole house to hear what you were saying. Standards of etiquette were impossible to maintain when men and women were forced to meet in the narrow hallways at all hours of the day or night, in all stages of undress, on their way to or from the 'honey bucket.'[535]

Although the residents love for gossip, a few of these romances led to life-long commitments and marriage, referred to as "claiming alleyway kinship" (*pan longtang qin*).[536]

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528 Lu, 233.
529 Lu, 233.
530 Lu, 233.
531 Lu, 235.
532 Lu, 235.
533 Lu, 235.
534 Lu, 235.
535 Lu, 235.
536 Lu, 236.

Happy claiming of alleyway kinships did actually occur; thus, providing fuel for gossip. However, most alleyway romances ended unhappily. In reality, intimacies and love affairs between *lilong* neighbors were something most residents tried to avoid; perhaps because they saw each other as a "big family."[537] Most residents reasoned that for romances and fun, one should look beyond one's *lilong* community.[538] A resident explains this rationale:

> We Chinese believe that 'a rabbit won't eat the grass that grows near its lair.' Even thieves usually won't steal from their next-door neighbors. It is shameful if things don't come out well and one becomes the topic of gossip. In old Shanghai there were plenty of places for fun. Why should one have *those things* among neighbors? Only country bumpkins would be interested in looking around for a partner (*duixiang*) from among their neighbors.[539]

Additionally, the combination of the following factors led to the limitation of romances and "sexual peccadilloes"[540] within *lilong* compounds: Confucian ethics; the abundance of options to have fun throughout Shanghai; and, as Lu (1999) describes, the "aloofness of relations among neighbors (especially in well-off neighborhoods)."[541] Regardless of the romantic challenges faced by residents, overall friendliness and closeness overflowed in the *lilong* communities.

Of course, as with most families, not everyone enjoys the positivity of family-bonding: Not everyone spent their evenings "enjoying the coolness" (*cheng fengliang*) and camaraderie shared in the alleyways.[542] In fact, the noise made by the joy and excitement of evening alley-living, was difficult for some residents, especially when considering the fact, that some people stayed up past mid-night chatting away in the lanes.[543] Workers and machines that ran day and night in "alley-factories" also kept the dwellers from resting at night.[544] More than anything, the lack of privacy and lack of the necessary and comfortable physical distance from one person to another, led to many conflicts and squabbles between the "big families" in *lilong* compounds.[545] As cited by Zhao (2004), local writer and *lilong* resident during his youth, Shen Shanzeng, coined the term of "life in the alley" (*long-tang ren-sheng*) to describe his alley-living experience.[546] Shanzeng further illustrates his "life in the alley" by "ruthlessly pointing out its dark side:"[547]

> [F]amily . . . life in the old *lilong* was short of doors and windows, being encroached upon by alley-living. . . . *Shikumen* is not suitable for living not only because of its poor living

537 Lu, 128.
538 Lu, *Beyond the Neon Lights*.
539 Lu, 237.
540 Lu, 237.
541 Lu, 237.
542 Lu, 230.
543 Lu, *Beyond the Neon Lights*.
544 Lu.
545 Lu; Zhao, “From Shikumen to New-Style.”
546 Zhao, “From Shikumen to New-Style,” 70.
547 Zhao, 70.

> facilities, but more importantly, because of the lack of necessary distance between family members within a family and between families. Intimacy can also be disturbing. . . . To grown-ups, the alley in the *lilong* is just a pathway, or a place where all kinds of rumours [*sic*] originate.[548]

In short, some people in *lilong* compounds enjoyed and cherished alleyway-living while other people felt "much [*sic*] annoyed by its over intimacy and [were] anxious to move out."[549]

To supplement the safety provided by security guards patrolling the alleys, the informal system "self-regulating,"[550] "neighborhood watch"[551] system, what Bracken (2013) refers to as a "benign panopticon,"[552] helped further to prevent crimes.[553] The never-ending amount of activities which took place in the *lilong* lanes made this system possible[554] and neighbors felt safe living in alleyway-house compounds.[555] As Lu (1999) describes it:

> One could truly be relaxed when one was at work: should it rain unexpectedly, the next-door grandma would help bring in the clothes that had been hung out to dry. Nor need to worry about thieves breaking in; neighbors all kept an eye out for trouble. As a Shanghai folk saying put it, "Neighbors are better than relatives."[556]

They knew they could rely on one another.

Despite the Chinese saying that "An acquaintance next door is better than a relative in the next town," this saying did not reflect the long-term commitment to one another.[557] Lu (1999) argues that most dwellers did not share a feeling of shared identity or an "enduring sense of community" within *lilong* neighborhoods.[558] As stated previously, even the way neighbors addressed one another spoke of the lack of long-term commitment to each other in the early 1900's. Typically, residents referred to each other by a combination of the type of room he or she lived in, and the "age and sex typing" of the person.[559] For example, "the Uncle of the Li Family," "the Mother of the Zhang Family," "Daguo's dad," "the Grandma of the Front Living Room," "the Aunt on the Second Floor," "the Sister-in-Law of the Pavilion Room," and so on.[560] Yisan (2011) reports that residents were often reluctant to move out of *lilong* communities because they missed the solidarity once they moved away, even when moving to neighborhoods with more

548 Zhao, 70.
549 Zhao, 73.
550 Bracken, *The Shanghai Alleyway House*, 101.
551 Lu, *Beyond the Neon Lights*, 230.
552 Bracken, *The Shanghai Alleyway House*, 110.
553 Yisan et al., *Shanghai Shikumen*.
554 Lu, *Beyond the Neon Lights*.
555 Yisan et al., *Shanghai Shikumen*.
556 Lu, *Beyond the Neon Lights*, 230.
557 Yisan et al., *Shanghai Shikumen*, 124.
558 Lu, *Beyond the Neon Lights*, 228.
559 Lu, 225.
560 Lu, 225.

convenient services and amenities than the older *lilong* models.[561] Lu (1999) additionally confirms that people tended to have closer relationships with their neighbors in earlier *lilong* models such as the Canton Style than those in the more recent models such as the Apartment Style:

> As a general rule, neighbors in shikumen houses had closer relations than their counterparts in the new-type alleyway houses. The higher the quality of house, the less communication among its dwellers.[562]

Lu (1999) asserts that any "sense of community" that developed between neighbors came about from a shared and temporary experience of living together:

> Shanghai alleyway-house compounds to some extent resembled China's villages, where farmers lived in the same "insular, and perhaps also solidary [*sic*], community" for generations. However, while a sense of community may grow among villages tied together by bonds of residence, workplace, and, sometimes, kinship such a sense rarely grew among the city people, who were never tied together by production or kinship and who merely happened to live within the boundaries of the same alleyway-house compound.[563]

This possible sense of identity within a *lilong* compound, "was no more than a casual mentioning," as it was the routine and physical proximity of doing daily and common chores next to each other, which forged intimate relationships.[564] As Lu (1999) further declares, "the bond of neighbors was situational: they were people jammed together because they lived in an extremely crowded city."[565]

Overall, as Lu (1999) insists, "there was little evidence of a sense of community based on the lilong, but residents, at least some 'public minded' ones, occasionally worked together on matters of mutual concern"[566] and in "time[s] of crisis."[567] Although some people may have given preference to lease rooms to tenants from the same native town as themselves, which one could claim was an expression based on a shared sense of community, there was still a feeling of "mutual indifference"[568] between most *lilong* neighbors. Lu (1999) hypothesizes that this feeling of "mutual indifference"[569] was due to people often relocating throughout the city simply because they "liked to move."[570] Perhaps there was not a significant sense of long-term attachment and investment between neighbors in the Late-Period *Lilong* style neighborhoods. However, despite

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561 Lu, 228.
562 Lu, 229.
563 Lu, 224.
564 Lu, 224.
565 Lu, 224.
566 Lu, 222.
567 Lu, 228.
568 Lu, 222.
569 Lu, 222.
570 Lu, 222.

that lack of sense of community, it was still more commitment than in the later *lilong* models and other gated community typologies constructed in Shanghai during recent decades.[571] This can be explained when taking into account the economic success of most urban residents in China.[572] With greater financial resources, people no longer had to rely on one another to get things done.[573] As such, instead of asking a close neighbor for a favor, such as babysitting one's child, one could simply pay to hire a babysitter for said service.[574] Moreover, when people no longer needed to help and invest in neighborly relationships with the implied, common western saying, "I scratch your back, if you scratch mine," friendships and shared senses of community dissipated with them in the more affluent contemporary neighborhoods.[575]

3.4 Conclusion

The *lilong* typology, in its various styles, developed as a response to the particular and quickly changing circumstances surrounding Shanghai in the late 1800's and early 1900's, especially that of the Late-Period *Lilong* style. In the same way, alley-living, as it came to be practiced in the compartmentalized *lilong* neighborhoods, developed as a response to the demands and supply needs of the "market."[576] In a "microcosm of the city,"[577] which was "over-concentrated and over-congested,"[578] the words of talented writers who were inspired while "enjoying the coolness"[579] in the alleyways, coupled with the ingenuity of children and elders, made alley-living seem rather "poetic" at times.[580] Alley-living was made up of people who not only lived within these "ambiguous"[581] spaces, but also worked, socialized, entertained, and conducted most of their daily interactions inside of the lanes.[582] Furthermore, the relationships that were cultivated within the alleyways—the compound's largest social spaces—were made possible through the specific spatial organization of the neighborhood coupled with the particular historical circumstances of Shanghai during that period.[583]

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571 Yushu Zhu, Werner Breitung, and Si-ming Li, "The Changing Meaning of Neighbourhood Attachment in Chinese Commodity Housing Estates: Evidence from Guangzhou," *Urban Studies* 49, no. 11 (August 1, 2012): 2439–57, https://doi.org/10.1177/0042098011427188; Pow, *Gated Communities in China*.
572 Pow, *Gated Communities in China*.
573 Bracken, *The Shanghai Alleyway House*.
574 Zhu, Breitung, and Li, "The Changing Meaning of Neighbourhood Attachment in Chinese Commodity Housing Estates."
575 Zhu, Breitung, and Li.
576 Zhao, "From Shikumen to New-Style," 72.
577 Bracken, *The Shanghai Alleyway House*, 94.
578 Zhao, "From Shikumen to New-Style," 72.
579 Lu, *Beyond the Neon Lights*, 230.
580 Zhao, "From Shikumen to New-Style," 70.
581 Zhao, 70.
582 Lu, *Beyond the Neon Lights*.
583 Lu.

Architecturally, the *lilong* alleyways offered a new and distinct circulation and settlement pattern that was gradually transformed and modernized to respond to the needs of an industrializing and globalizing Shanghai.[584] The alleys were no longer mere traffic conduits and the multipurpose and unclear nature of the alleys challenged the traditional hierarchy and spatial order and outright blurred the private and public realms.[585] The "interiorisation"[586] of exterior spaces, made the alleyways, and by extension the *lilong* model, a new form of spatial typology. The unique and clever use of exterior space was maximized in this dense mass housing model, while also managing to keep it on a reasonable "humanized scale."[587]

Socio-culturally, the *lilong* alleyways "transgressed as well as redefined"[588] the boundary between the residents' social classes.[589] Zhao (2004) claims this to be true as well as when referencing to the *lilong* compounds as a whole.[590] The *lilong* neighborhoods, but specifically the alleyways, were an "ideal vehicle for regrouping an uprooted population during turbulent years."[591] In bringing different kinds of people (occupation, gender, age, social class, etc), the alleyways fostered a form of social network with a "strong"[592] sense of community among the *lilong* residents, even if "situational."[593] A sense of community which was developed "through daily life in social-spatial interactions for decades" and became embedded in the Late-Period *Lilong* style: one that has not been replicated in many contemporary residential models in Shanghai.[594] Furthermore, one could argue, as does Lu (1999), that this unique sense of community was already beginning to be lost in the more modern *lilong* styles, such as the Apartment *Lilong* Style.[595]

The historical *lilong* model came to be "considered a city legacy, a new tradition in the urban dwelling history of Shanghai."[596] As such, the *lilong* type, and by extension the alleyways, became an "irreplaceable"[597] and crucial element to the identity formation of Shanghai.[598] The particular architectural design and the manner in which this housing compound was utilized, innovatively, and at times, unintentionally, the *lilong* model successfully addressed many forms of

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584 Zhao, “From Shikumen to New-Style.”
585 Liang, “Where the Courtyard Meets the Street.”
586 Zhao, “From Shikumen to New-Style,” 72.
587 Zhao, 72.
588 Liang, “Where the Courtyard Meets the Street,” 482.
589 Lu, *Beyond the Neon Lights*.
590 Zhao, “From Shikumen to New-Style.”
591 Zhao, 72.
592 Zhao, 72.
593 Lu, *Beyond the Neon Lights*, 224.
594 Zhao, “From Shikumen to New-Style”; Chow, “In a Field of Party Walls”; Zhu, Breitung, and Li, “The Changing Meaning of Neighbourhood Attachment in Chinese Commodity Housing Estates”; Jacobs, *The Death and Life of Great American Cities*; Pow, *Gated Communities in China*; Chow, *Changing Chinese Cities*.
595 Lu, *Beyond the Neon Lights*.
596 Zhao, “From Shikumen to New-Style,” 73.
597 Zhao, 73.
598 Lu, *Beyond the Neon Lights*; Chow, *Changing Chinese Cities*; Zhao, “From Shikumen to New-Style”; Chow, “In a Field of Party Walls”; Yisan et al., *Shanghai Shikumen*; Bracken, *The Shanghai Alleyway House*; Liang, “Where the Courtyard Meets the Street.”

challenges all at once.[599] Unfortunately, many *lilong* communities have been demolished in recent decades.[600] With the razing of *lilong* compounds, the city of Shanghai is losing its "legible heritage."[601] Shanghai is also losing its trademark "sense of being nested—in a district, in the street, in the community, in the alley, in the room,"[602] which is showcased in the *lilong* housing typology. Perhaps, instead of globalizing Shanghai without reference to its past, designers and planners should aspire to capture the essence of Shanghai and aim for the continued transformation of the *lilong* model addressing, in a positive and proactive manner, the particular circumstances of contemporary Shanghai.[603]

This is especially the case when looking to house the migrant worker population in present-day Shanghai. As an extremely vulnerable social group, the migrant population requires a housing typology that allows them to continue utilizing a successful method of transitioning into the city—social networking. The unique exchange between the alleyway spaces and the residents led the Late-Period *Lilong* style to effectively met the networking needs of migrant workers. Furthermore, if strategically interpreted for a present-day context, the characteristic design elements of the alleyway social condition could prove useful when designing migrant worker housing projects in Shanghai. Importantly, the *lilong* is a noteworthy and imperative housing model to reference when designing community buildings with design features that specifically enable migrant workers to build communities and social networks.

599 Zhao, “From Shikumen to New-Style.”
600 Yisan et al., *Shanghai Shikumen*.
601 Chow, “In a Field of Party Walls,” 24.
602 Chow, 24.
603 Lu, *Beyond the Neon Lights*; Chow, *Changing Chinese Cities*; Zhao, “From Shikumen to New-Style”; Chow, “In a Field of Party Walls”; Yisan et al., *Shanghai Shikumen*; Bracken, *The Shanghai Alleyway House*; Liang, “Where the Courtyard Meets the Street.”

CHAPTER 4

DESIGN CONCEPTS FOR BUILDING COMMUNITIES

Good architecture is about identity—

it is responsive to time, place, culture, and who we are today.[604]

604 Long, "Paul T. Frankl's Pacific Modernism."

CHAPTER 4 | DESIGN CONCEPTS FOR BUILDING COMMUNITIES

4.1 INTRODUCTION

To "redefine the abstract concept of the *lilong"* model and format it in a way that the *lilong* essence can be captured and taken into account in present-day urban migrant housing designs—is the overarching purpose of this project.[605]

Chapter 1 describes a few moments of the lives of Dan and Anlin, two construction workers in Beijing, and how as migrant workers, they and their families face many challenges in the city.[606] Because the migrant worker population is an extremely vulnerable group in substandard housing conditions, it is in dire need for a community building with design concepts for building social community—a model that not only facilitates the integration of migrants into the city but also helps improve their quality of life. An analysis of the social character of the historical *lilong* model illustrates that much can be learned from this earlier typology for workers' housing and the *lilong* type suggests present-day solutions for migrant-worker community buildings.

Furthermore, Chapter 1 highlights the work of Non Arkaraprasertkul (2009). He proposes that "the architecture of *lilong* does not confine itself to certain forms or physical configurations; instead it is an “abstract concept” of an urban neighbourhood—the spatial organization, architectural practicality, casual formation of semi-private space, and community lane-life—a concept that should be taken into account for the design of urban housing today."[607] Arkaraprasertkul's (2009) argument is the foundation of what this project aspires to achieve in this chapter: to customize the "abstract concept" of the *lilong* type for the migrant worker population and their cultural traditions of networking to increase their likelihood of success in contemporary Shanghai.

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605 Arkaraprasertkul, “Towards Modern Urban Housing,” 11.
606 Bronner and Reikersdorfer, *Urban Nomads Building Shanghai*; Zhang, *Strangers in the City*; Liu, *Spatial Mobility of Migrant Workers in Beijing, China*; Zhang, *Strangers in the City*; Wu, Zhang, and Webster, *Rural Migrants in Urban China*; Al, *Villages in the City*; Ngai, *Migrant Labor in China*; Swider, *Building China*.
607 Arkaraprasertkul, “Towards Modern Urban Housing,” 11.

This chapter identifies and describes a series of design concepts based on the Late-Period *Lilong* style which made it a successful housing form for migrants in Shanghai in the early 1900's. However, as described in Chapter 1 and 2, there were specific factors which led the historical *lilong* typology functioning as it did and this can be illustrated by the following: The significant increase in population in Shanghai which resulted in a lack of affordable housing options. The high demand and short supply of housing then inspired people to sublet their houses. The subletting practices then led to an astonishingly full and intense living condition in the *lilong* neighborhoods. The overcrowding then led to the appropriation of the alleyways, which came to be the characteristic social aspect of the community—an unintentional community space where relationships were formed and cultivated, even if only circumstantial and temporary.

It is not the purpose of the project to mimic or reproduce the particular historical conditions of Shanghai that allowed the *lilong* typology to thrive as it did during the early 1900's. Instead, this project focuses on drawing out the aspects and essence of the historical events that made it a successful community building model, mainly focusing on the alleyway social condition. The goal is to devise concept ideas to facilitate those aspects in present-day housing designs and to identify the architectural design elements which made the *lilong* model function as well as it did. An additional objective is to figure out how to maintain the social functions that took place in the historic alleyways and to create a sense of familiarity without forcing people onto the alleyways because they have nowhere else to go to do their daily chores and activities due to the limited interior housing spaces. Moreover, this project attempts to answer how space facilitates those functions and this chapter aims to identify the architectural design elements of a community building which can provide the residents with opportunities for engagement and networking—this is a design element that is important in all housing projects but especially in the case of migrant-worker housing developments in contemporary Shanghai.

The alleys, which were on a gradient of privacy as described in Chapter 3, were historically circulation spaces that later became appropriated by the residents and eventually morphed into the most extensive community spaces. As such, the design intention behind the design concepts and proposed scheme is to create a sense of familiarity for the residents in the public spaces to recreate the sense of social camaraderie of alley-living. A relaxed sense of friendliness and intimacy between people and the ability to easily engage with one's neighbors—it is a sense of intimacy where one is able to smell the food that neighbors are cooking and almost being able to taste it—it is hearing children laughing and playing nearby—it is hearing and feeling the discord between couples, friends, and families—it is being engaged with one another.

As clarified in the introduction chapter, the design intentions and architectural spaces put forth in this project do not deterministically suggest that because spaces are designed with a particular intent, the user groups will necessarily utilize said spaces in that specific manner. In

other words, the social behavior of earlier *lilong* residents was not entirely determined exclusively by the architectural *lilong* elements.[608] However, this thesis argues that there are some significant and characteristic design elements of the earlier *lilong* typology that could prove useful if reinterpreted for a present-day context. As such, space does have the potential to facilitate a sense of familiarity and intimacy between its user group. For example, people can be brought together by providing designated spaces that host a number of activities that residents can engage in together such as doing laundry, supervising children on the playground, and eating a meal while watching others play mahjong. By designing spaces which make this type of activities visible and accessible to others, people can identify and establish relationships with each other based on their shared interests. Additionally, communities can be built, as in historical *lilong* model, based on the routine and physical proximity of daily interaction. For example, walking children to school next to the same kids every day, catching the morning sun in the same branch alley and seeing the same residents walk by, or fixing one's bicycle at the repair shop that one walks by every day on the way to work. All of these examples are social aspects that can be influenced by strategic architectural and spatial elements—which were considered when developing the design concepts proposed in this project to aid the rural-urban migrant worker population of Shanghai. With this in mind, this scheme would also be steered on the need of community buildings with design concepts that explicitly enable migrants to build a supportive community so that they may continue to contribute to the overall economic success of China.

The rationale behind developing a series of design concepts rather than merely providing a housing scheme is that designers, planners, developers, and other invested parties, can reference the concepts when developing contemporary housing projects for migrants in Shanghai. The advantage of having a series of design concepts lies in the flexibility and strategic integration of the concepts into a design scheme. Meaning, that by proving a list of elements to take into account when developing migrant housing, this project is providing a set of tools with which anyone can design community buildings for building communities. Thus, rather than providing a single housing scheme to begin to address the migrant worker housing issue in Shanghai, the author is providing a form of methodology to help develop various community building designs for building communities and networking. Therefore, the power and strategic advantage of having design concepts available means that these design ideas can be integrated into many different schemes.

This chapter also provides a design scheme, "Contemporary *Lilong*;" which strategically incorporates the design concepts proposed in this project: graduated privacy, benign panopticon, fluid space, accessibility to neighbors, affordability, variety of unit size, and walkability. The

608 Dostoglu, “Architectural Deterministic Thinking In The Development of Urban Utopias, 1848-1947”; Gutman, *People and Buildings*.

proposed Contemporary *Lilong* design scheme is a new form of community housing. It is an exploration to successfully and innovatively integrate several of the design concepts in a way that continues the transformation of the *lilong* typology.

The scheme and typology are not the only solutions to the current substandard migrant-worker housing conditions in Shanghai, and there are many ways to integrate the proposed design concepts into a community building for building communities. Furthermore, this housing model will not resolve all of the problems related to the migrant worker population in present-day Shanghai. However, it will begin to endeavor on the lack of humane living conditions for migrants as well as open the lines for conversation and discussion about how to better address the issues related to the floating population in contemporary Shanghai.

4.2 Proposed Design Concepts

4.2.1 Design Concept: Graduated Privacy

4.2.1.1 Description:

Graduated privacy refers to the idea that different spaces throughout the compound have varying degrees of privacy, depending on their physical location on the compound.

4.2.1.2 Relevancy:

Shanghai is one of the largest cities in the world—it can be magnificent yet intimidating at the same time, especially for people from rural areas. In the historical *lilong* model, the concept of graduated privacy worked well to ameliorate the intensity of the city since the concept took form at the city and individual family scale. As such, residents feeling protected from the unpleasant elements of Shanghai is an imperative component in the design process. Chapter 1 documents that a small percentage of rural-urban migrant workers relocate directly to the cosmopolitan city of Shanghai from a local village or town. In situations such as this, most people new to the city would appreciate some sort of filter or protection to control the amount of exposure one has to all of the elements of city-living. Consequently, a sense of protection from the city is especially important when designing housing communities for the migrant worker population as many may have never lived in an urban area of similar global-scale as that of Shanghai.

The *lilong* compound's entryways were marked with a stone-gate in a similar manner as the *shi-ku-men* marked the main entrances of the *lilong* housing units. As a spatial design

element, the concept of graduated privacy is relevant because of the use and significance of the historical *shi-ku-men* (stone-arch-gate) design feature, as explained in Chapter 2. The stone-gate on the southern entrance of the house served to mark the transition point into a private space from a semi-private space (branch alleyway) (Figures 4.1-4.3).

The concept of graduated privacy also determined the types of activities that took place in the historical *lilong* neighborhood, especially within the alleyways, as Chapter 3 documents. For example, the elderly selected the branch alleyways instead of the main lanes to play games and chat with their neighbors so that they would not be in the way and inconvenience other residents passing through the main alleys. The streets and main alley, which were public and semi-public spaces, provided a greater level of visibility for peddlers and their products than what was provided within the branch alleys. However, evenings spent together with neighbors "enjoying the coolness,"[609] and snacking on delicious food sold by peddlers granted additional business opportunities, thus, indicating that peddlers had a place within the branch alleys as well depending on the time of day and service for sale (Figures 4.4-4.12).

Furthermore, as documented in Chapter 3, the different types of activities that took place throughout the *lilong* compound tended to give residnets a sense of safety, especially when they felt they had control over who accessed the alleys. It was a standard precautionary practice for residents to "police" any strangers they saw in the alleyways. As such, residents who lived closer to the city streets (public spaces), were more likely to feel more vulnerable to crimes than the residents that lived in the units at the end of a branch alley (semi-public space), where there were no side-entrances into the compound. This was the case because strangers are less likely to wander into the ends of branch alleyways than they are in the central alleys near the compound main-entrances (Figures 4.1-4.2, 4.8-4.11).

4.2.2 Design Concept: Benign Panopticon

4.2.2.1 Description:

A benign panopticon, as a self-regulating system, refers to the idea that residents can hold one another accountable for their actions in exchange for a safer and more united community. This design concept is a community-conscious philosophy in which residents feel comfortable keeping in mind the safety and well-being of the other residents because they, in turn, rely on their neighbors to keep their safety and well-being in mind.

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609 Lu, *Beyond the Neon Lights*, 230.

Visibility is the key factor behind the benign panopticon philosophy. Residents hold each other accountable by being able to see each other while at the same time everyone else is also visible to them. Hence, independently of whether other residents can see their neighbors, most people are likely to behave in the same manner as if their neighbors were watching them.

4.2.2.2 RELEVANCY:

The design concept of the benign panopticon is only relevant in this project in regards to the alleyway-living condition, not to the particular interior *shikumen*-living conditions.

As a community building design concept, the benign panopticon is relevant because it provided residents with a sense of intimacy and security, thus, leading people to feel safe when living in *lilong* neighborhoods. The shop-houses at the periphery of the compound contributed to the perceived sense of protection from the city as well as the residents' practice to look out for their neighbors and police strangers moving through the alleys while doing their chores and activities within the alleyways, as illustrated in Chapter 3 (Figures 4.1, 4.8-4.11).

Moreover, by physically being able to see one another, residents could also identify commonalities between themselves and other neighbors. The high visibility factor created additional opportunities for association and collaboration for *lilong* dwellers, as explained in Chapter 3. When a resident saw a neighbor engaging in an activity of common interest, they could merely approach the fellow dweller and forge a relationship based on those shared interests without a formal introduction. As such, by investing in one another's safety and well-being while also being highly visible, the alleyways became active and vibrant communities where people spent their evenings together "enjoying the coolness"[610] (Figures 4.8-4.11). A sense of community, even if temporary as explained in Chapter 3, led many residents to help one another and form strong friendships with their neighbors. To the extent that it was common for residents to miss the strong sense of community with their neighbors once they moved out of *lilong* neighborhoods and upgraded to more modern housing areas.

In the case of present-day rural-urban migrant workers new to Shanghai, it is especially important that they have opportunities to establish and expand their social support group. As discussed in Chapter 1, migrant workers rely on their networking skills to survive and thrive in the city and are a vulnerable group in need of assistance to find necessities and resources, especially when they first relocate to Shanghai. Consequently, any contemporary housing design for worker housing must take into account the significance and practice of social networking for migrant workers.

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610 Lu, 230.

4.2.3 Design Concept: Fluid Space

4.2.3.1 Description:

Fluid space is a design concept that argues for a mixed-use neighborhood that is flexible, functionally and physically, thus, accommodating a variety of buildings utilized for different purposes such as commercial, residential, entertainment, institutional, and cultural. Additionally, the design concept of fluid space aims to blur the boundary between private and public spaces.

4.2.3.2 Relevancy:

Within the spatial design realm, the concept of fluid space is relevant since it signals directly the historical model's mixed-use practices, especially within the shop-house discourse which facilitated businesses such as alley-banks, alley-factories, and alley-stores to exist next to residential units. Chapter 3 describes the *lilong's* diversified functional and physical interconnectedness between the commercial and residential spaces, in combination with the entrepreneurial practices of peddlers selling products such as newspapers, fresh vegetables, cigarettes, toys, and sweets—all of which resulted in many neighborhoods functioning as self-contained units and as microcosms of the city (Figures 4.7, 4.12).

Additionally, fluid space is relevant because the distinction between public and private spaces was regularly blurred within the historical *lilong* design when private residential and commercial activities took place outside in the publicly accessible alleyways. Consequently, it is implied that the concept of fluid space is also significant as an informal community building design concept, physically and socially, because by extending private activities into public spaces, residents had additional community spaces. Thus, they had greater opportunities to connect and network with neighbors, which was especially evident in the evenings when people would choose to leave the privacy of their homes to enjoy the coolness with nighbors in the public alleyways, as is detailed in Chapter 3 (Figures 4.8-4.13).

For rural-urban migrant workers new to Shanghai, a housing community that integrates the design concept of fluid space has the potential to meet all three of their primary needs: a stable form of employment, a social network, and an affordable house—a neighborhood to work, live, and play.

4.2.4 Design Concept: Accessibility to Neighbors

4.2.4.1 Description:

Accessibility to neighbors is a design concept that focuses on creating moments where residents can engage in diverse ways with their neighbors and thus, facilitating socialization and networking opportunities through architectural design elements.

4.2.4.2 Relevancy:

Dwelling units were about 10.5-13 feet wide (3.2-3.9 meters) in the historical model and the proximity between doors (north and south) allowed people to be physically closer to their neighbors when they were entering or exiting their homes, as described in Chapter 2 (Figures 4.5, 4.14-4.16). The combined row-house with the double entrance layout created and expanded the number of people and spaces available to form social communities; more than would be feasible with a more square-shaped-one-door housing scheme. As such, both architectural features were vital in accessing one's neighbors, which is essential in developing social networks.

Residents also had additional opportunities to relate with others when they lived in compartmentalized *lilong* quarters than they did when living in non-sublet houses—statistically, more people were available. Furthermore, the alleyway chores and evening activities provided the *lilong* populace added access to their neighbors; which increased the potential for association and socialization between them, as is documented in Chapter 3 (Figures 4.8-4.13, 4.17).

As presented in Chapter 1, it is imperative for present-day migrant workers to have opportunities and spaces where they can easily connect with others due to their reliance on social networking when establishing themselves in the city. Consequently, with amplified access to neighbors, new migrant workers in Shanghai can, in turn, maximize the number of resources available to them and their likelihood for success in navigating the city and meeting their primary needs.

4.2.5 Design Concept: Affordability

4.2.5.1 Description:

The design concept of affordability refers to the decision-making process throughout the different phases of the lifecycle of the project (design, construction, delivery, management, and so on), which prioritizes cost and affordability of each housing unit for the average rural-urban migrant worker in present-day Shanghai.

4.2.5.2 Relevancy:

Chapter 2 explains how the Late-Period *Lilong* style developed as a response to the changing family composition in Shanghai and their need for a cheap mass housing model. The *lilong* design, thus, integrated concrete floors and load-bearing brick walls, due to the materials' relative affordability, and continued utilizing the typical, basic and repetitious, *lilong* master plan layout: shop-houses at the periphery of the compound and rows of residential units filling the interior. Furthermore, almost every single type of difference among units existed because of the modifications completed by the house-owner or the second-landlord, as addressed in Chapter 3 (Figure 4.1).

As a community building design concept, affordable units, is a relevant philosophy because of the wide-range of people that were able to afford an entire house or a small room within one of the *lilong* neighborhoods, as is pointed out in Chapter 3. As such, the particular variations in occupant composition facilitated a culturally rich and vibrant community where people tried to celebrate their similarities and differences as they built various forms of social networks (Figures 4.8-4.10).

Affordability is a crucial design driver in worker housing since most migrants in present-day Shanghai have limited financial resources; generally due to their limited education and skill set, as explained in Chapter 1. Furthermore, once they arrive at the city, some workers find that employers do not pay them for their work on a timely basis—a reality that is exacerbated by the lacking legal protections of the *hukou*. As such, ensuring that the units are affordable to the average migrant worker in modern-day Shanghai is an essential design concept in any migrant-worker housing scheme.

4.2.6 DESIGN CONCEPT: VARIETY OF UNIT SIZE

4.2.6.1 DESCRIPTION:

The concept of a variety of unit size is relatively self-explanatory. It refers to the idea of having housing units of different sizes such as one-bedroom units, two-bedroom, three-bedroom units, studios, etc., all within the same building.

4.2.6.2 RELEVANCY:

As a spatial design element, variety of housing unit was not a relevant element within the design of the historical Late-Period *Lilong* style since residential and shop-house units were identical to each other when they were first constructed. However, once the dwellings became compartmentalized for subletting purposes, each house was able to provide tenants with a variety of room sizes and thus, accommodate many different kinds of occupants (Figures 4.16-4.17).

The makeshift subdivided units suggest that a variety of residence type is relevant for contemporary housing and is significant for community building since many different kinds of people lived in the same compartmentalized *lilong* neighborhood. For example, as Chapter 3 describes, writers and students tended to lease the "*tingzijian*,"[611] a small, dark room located over the kitchen in the back of the house, and a nuclear family; such as a policeman, his wife, and his two teenage daugters, could then have rented the front living room.[612] Overall, *lilong* residents could form relationships and business partnerships of various kinds with individuals from diverse social groups as they found themselves established in the different compartmentalized spaces (Figures 4.8-4.11).

As mentioned above, the ability for rural-urban migrant workers to network with diverse kinds of people and build a supportive community, is an essential design element for worker housing projects in modern Shanghai. Accordingly, it is vital for migrants to be able to reach out to different groups for information relating to the navigation of the city as they will also be provided with additional resources which will increase their likelihood to reach their goals.

611 Yisan et al., *Shanghai Shikumen*, 140.
612 Lu, *Beyond the Neon Lights*.

4.2.7 Design Concept: Walkability

4.2.7.1 Description:

The concept of walkability refers to the idea of focusing on providing residents with a comfortable and user-friendly walkable community that maximizes the amount of social spaces, rather than a neighborhood emphasizing the accommodation of the vehicle.

4.2.7.2 Relevancy:

The Late-Period *Lilong* style was developed for the working class who could not afford to purchase a vehicle; thus, most branch alleyways were only about 8-10 feet wide (2.5-3 meters) and only had enough space for one rickshaw to get through, as Chapter 3 reports (Figure 4.14).

With the subdivision of residential units and the lack of the appropriate interior space to meet all of the tenants' needs, the alleys were appropriated by residents to do chores and daily activities (cooking, eating meals, bathing children, etc.). Peddlers also appropriated the lanes in their own way and sold their products and services (newspapers, cigarettes, vegetables, etc.) within the alleys where they had a large consumer source. In addition, one can infer that people tended to feel safer with the limited rickshaw traffic and that fewer squabbles took place as a result of rickshaw related accidents. Hence, the narrow and active alleys suggest that a walkable community is a significant design concept for a working-class housing model; specifically, the migrant worker (Figures 4.7-4.14, 4.17). Therefore, it is vital for workers in modern-day Shanghai to be able to address their basic needs in a pedestrian-friendly neighborhood. As such, current migrant-worker housing typologies need to emphasize a walkable community over one that is vehicular focused.

4.3 Contemporary *Lilong* Style Design Scheme

The rural-urban migrant worker population requires a community housing model that helps improve their quality of life while also facilitating their integration processes into the city through increased networking opportunities. An analysis of the social and architectural character of the Late-Period *Lilong* style reveled several challenging components which have been fundamental in the design features integrated into the proposed Contemporary *Lilong* style design scheme. The Contemporary *Lilong* model is a new form of community housing typology that

continues the transformation of the historical *lilong* model. It is a community model that is specifically designed and customized for the migrant worker population in present-day Shanghai that aims to facilitate the integration of migrants into the city as well as to help improve their quality of life (Figures 4.18-4.22).

In a similar fashion as the historical *lilong* model (Figure 4.1), the Contemporary *Lilong* style design scheme is a form of a microcosm of the city designed to be a mixed-zoned community with the capacity to host a range of industries and services. Serving primarily as a residential community, the shop-houses at the perimeter of the compound allow for part of the variation in residential, commercial, entertainment, and cultural activities, such as restaurants, alley-libraries, alley-elementary schools, alley-hotels, and alley-factories. In contrast to the historical model, in the proposed design, the shop-house is spatially flexible and activated within the interior of the compound—the alley-school and alley-club house are examples of non-residential institutions taking form within the interior of the neighborhood (Figures 4.1, 4.23-4.29). Exceptions to the shop-house practice can be expected as not every single shop-house is likely to be a mixed-zone unit. Independently of these exceptions, the occupants of the proposed design scheme can potentially live, work, and play within their neighborhood. Due to the significance of the shop-house in both the historical and contemporary design along with the shop-houses' potential to help keep the streets and alleyways active throughout the day, the shop-houses were designed to be constructed in a light gray brick color to make them stand out even more. Thus, adding another level of communication of their unique historical nature, design, and function that is observed along the street level, but also within the adjacent branch alleyways at the other end of the shop-house unit (Figures 4.21-4.22, 4.30-4.35).

The design integrates a variety of opportunities for people to come together in some spaces throughout the neighborhood. In the Contemporary *Lilong* design, a building prototype is replicated and arrayed in a series of rows of towers that form alleyways between them, similar to the Late-Period *Lilong* style (Figure 4.1). Contrasting the historical model, the building prototypes are innovatively laid out in circuitous, an in-and-out type of pattern that allows for an additional sense of privacy within the niches created (Figure 4.32-4.38). At the periphery of the compound, on the street level, there are benches and seating areas located in these more private spaces in front of some shop-houses, making them an attractive feature to shop-house customers and residents. The outdoor seating areas also create an opportunity for the streets to be busy and full of activity not only in the daytime, but also in the evenings, and depending on the business, late into the night (Figures 4.30, 4.32). Overall, the circuitous, in-and-out pattern and the activities held within these spaces facilitate a potentially unique experience that could prove beneficial to the success not only to the migrant workers but to China as a whole.

The arrayed building prototypes have two building designs that make up the entire compound—north- and south-facing towers and west- and east-facing towers—four housing-unit types correspond and compose each tower design, all of which have concrete floors and load-bearing brick walls (Figures 4.18-4.23, 4.39-4.40). The simplicity of the repetitious design is intended to help ensure that the units stay as affordable as possible while also continuing the comprehensive spatial design character of the historical neighborhood model (Figure 4.1). This particular scheme has four rows of housing towers (counting from north to south) and eight rows of housing towers (counting from west to east) (Figure 4.23). However, the specific number of rows can be modified in all directions to accommodate different site sizes and to avoid unnecessary and inappropriate construction and design costs. The variation in brick color was strategically selected to break down the super-block issue that is common in many community housing designs in present-day Shanghai. In this manner, despite the fact that the towers are identical, the difference in brick color will set them aside from the other towers and create a unique neighborhood character and identity (Figures 4.20-4.22, 4.31, 4.34-4.37).

The proposed design is a neighborhood with towers that taper off like a pyramid, starting on the second floor moving up to smaller units on the seventh floor (Figures 4.18-4.22). A neighborhood with a variety of housing-unit types and sizes allows occupants the opportunity to upgrade residential units without uprooting their entire family, thus forcing them to leave behind their entire social support system developed within the community (Figures 4.39-4.40). Additionally, the variation in housing units is intended to help make the compound socially sustainable since a variety of people will be able to afford different housing units depending on their income. The variation of household income will thus enhance the likelihood for the development of a vibrant and culturally rich community as has been proposed in healthy neighborhood design elements by urban planners such Jane Jacobs.[613]

To create a neighborhood that promotes a sense of intimacy, safety, and protection from the city, the number of official entrances were limited. As such, there are only four main ways to enter the Contemporary *Lilong* style community: from the north, south, west, and east sides (Figure 4.23). As long as an individual enters from one of the four major entrances into the main alleys, one would see a stone-gate that psychologically and spatially mark the entry points into the compound, thus, continuing a "sense of being nestled: in a district, in the street, in the community, in the alley, in the room"[614] These gates thus communicate that one is entering a different kind of space and that the resident or visitor is leaving behind the public street space and entering the semi-public space of the main alleyways (Figure 4.41). The stone-gate spatial

613 Jacobs, *The Death and Life of Great American Cities*.
614 Chow, “In a Field of Party Walls,” 24. The proposed scheme does not have the four compound stone-gates modeled into it. However, one can reference the historical model for shi-ku-men design examples for compounds and houses.

transition feature is present at the neighborhood- and housing-unit scale similarly to the historical *lilong* typology (Figure 4.42).

There are 16 "permeable shop-house" additional entry points throughout the periphery of the proposed compound (Figure 4.23). The permeable shop-house design feature was intended to continue the transformation of the *lilong* typology by advancing the shop-house design into something more convenient for the user group while also addressing the super-block design situation prevalent in many community designs in Shanghai. To outsiders, the permeable shop-houses looks almost identical to any of the regular shop-house businesses (Figures 4.22, 4.30, 4.43). However, the permeable shop-house is accessible from both the interior as well as the exterior of the compound (Figures 4.31, 4.43-4.45). Thus, the residents know that they can utilize the services of these diversified shops, cross through the shop spaces and enter the branch alleyways directly from the street, which make the permeable shop-houses extremely convenient to the residents because they will not have to walk all the way around to one of the main entrances (Figure 4.45).

This particular Contemporary *Lilong* style design scheme is close to 600 feet (182 meters) long and about 300 feet (91 meters) wide. As such, each permeable "block," for pedestrians, is about 300 feet (91 meters) long and 135 feet (41 meters) wide—this is approximately three small blocks in many European and North American cities. Overall, the super-block urban planning concept is very inconvenient for residents and pedestrians to move through. The permeable shop-house breaks the proposed design into several small blocks of about 70 feet (21 meters) long and about 60 feet (18 meters) wide, thus making the Contemporary *Lilong* neighborhood much more enjoyable to walk through (Figures 4.46-4.48). Additionally, the permeable shop-house design strategically closes off the ends of the branch alleyways to ensure a greater sense of safety and graduated privacy despite the fact that the shops are accessible from both the interior of the compound as well as the exterior (Figures 4.30-4.31, 4.41). A sense of safety because permeable shop-house owners helped function like informal security guards keeping an eye on the people passing by through their shops helping to keep the community safe; hence, promoting their individual success while contributing to their community as well.

Importantly, the Contemporary *Lilong* style design does not allow for any vehicular traffic to circulate through it since most rural-urban migrant workers in present-day Shanghai struggle to afford a vehicle. The removal of the vehicle from the interior neighborhood streets allows for the integration of more outdoor community spaces throughout the community without risking the physical safety of the occupants due to the vehicles moving through. Moreover, the historical *lilong* model also functioned predominantly as a pedestrian neighborhood with limited rickshaw

traffic which further influenced the design and priority for a walkable community scheme (Figures 4.13, 4.41, 4.49, 4.37, 4.50-4.53).

In a similar fashion as in the historical *lilong* model, the Contemporary *Lilong* style scheme has a variety of spaces with some gradations of privacy, visibility, and accessibility, all of which suggest the different types of activities held within each space (Figures 4.13, 4.41). At the street level, a public space, many commercial interactions take place and outsiders have the opportunity to contribute to the community's success (Figures 4.30, 4.32, 4.43). Within the main alleyways, semi-public spaces, one finds a variety of enticing and beautiful opportunities which residents and their families can engage in and build social networks and communities. People are highly visible in these spaces and can sit down with family and friends and talk about relevant topics such as politics, religion, the economy. All of this can happen while they watch over their children playing and laughing nearby; thus, providing them with the possibility of making connections and establish future networks here as well (Figures 4.49-4.54). In the branch alleyways, semi-private spaces, visibility is less but still very present. Here, the elderly can sit on benches to chat with friends while they warm up their bones on comfortably sunny days and continue to enjoy the benefits of their networks and well-established support systems (Figures 4.31, 4.33-4.35).

The specific layout and organization of the building prototypes with the circuitous, in-and-out type of pattern allows for an additional form of experience when walking through the alleys, especially within the branch alleyways that is reminiscent of a leisure-like stroll. The niches provide an additional level of privacy to the occupants, as well as blurring the boundaries between private and public spaces; semi-semi private spaces. Additionally, the design concept of graduated privacy not only works horizontally along the alleyways, it can also be experienced vertically. As one moves higher up in each tower, one is able to be less visible to other residents as well as be surrounded by less people. However, the roof gardens have the potential to be active community spaces and may, thus, lead to less privacy when if those spaces are actively used by residents (Figures 4.31, 4.33-4.35).

The branch alleyways allow for some commercial activities to take place in the form of contemporary peddlers or hawkers selling their products and services as in the historical model. The alleys, which function primarily as circulation spaces, are the most significant community spaces and their width was determined by the social character of the historical *lilong* model. The proposed design offers a number of alley widths that differ throughout the compound, thus, providing a graduated sense of intimacy and familiarity when relating with the built and social environment (Figure 4.41). For example, the narrow branch alleyways serve to physically bring people together, thus, creating another opportunity for interaction and community building when people pass by one another, in close proximity, on a regular basis. The balconies and the open

exterior hallways on the towers also function as design features to help physically connect neighbors with one another. Through a system of high visibility and close physical proximity, residents are more likely to establish associations and socialization opportunities (Figures 4.31, 4.33-4.35, 4.49-4.53).

The visibility factor continues to exist as one moves up the branch-alley-tower stairs from the ground floor; he or she continues to be highly visible to the other residents while they, in turn, are visible to him or her. This sense of visibility is especially apparent as one exits the stairway and moves into the exterior hallway on the third floor. By being visible and accessible to other occupants in the community, people are more likely to establish relationships and social networks based on visual commonalities. The third floor offers a variety of community spaces available to the residents such as game rooms, laundromats, playgrounds, and shop-house restaurants with delicious food. As such, the proposed design intends to offer a greater sense of intimacy and safety which is more likely to develop due to the high level of visibility, physical proximity, and routine of daily chores and activities (Figures 4.33-4.36, 4.38).

Having a variety of services so close together will allow the residents a greater sense of flexibility over their day and lifestyle and offer them more opportunities to network as well. As in the historical model, the physical proximity and routine of daily chores and activities are also likely to help residents develop socializing and associating opportunities in the Contemporary model. For example, washing one's clothes in the laundromats every Saturday night is likely to lead one to get to know and develop conversations with other residents who are also washing their work clothes on Saturday nights.

Within the proposed design, the fourth through the seventh floors are dominated by residential units primarily; the exceptions are the alley-school and alley-factory dormitories, a fluid space and mixed-zone design feature. On the eighth floors, roof gardens over every tower type offer more spaces for people to come together and develop social networks. Women can do their morning exercises up there with other women, and in the evenings, people from all walks of life can gather to talk and tell each other stories as they eat their snacks, potentially purchased from a contemporary alley-peddler selling their goods (Figures 4.55-4.56).

The tapering-off element of the towers provides a variety of unit types and sizes which also makes the neighborhood more likely to be socially sustainable—people from various social, economic groups should be able to afford a housing unit in this neighborhood. The physical proximity of the row-house style housing units, along with the double entrance to each housing unit (from the north and the south) allow for a higher amount of people to be available to the residents to form social networks (Figure 4.23, 4.31, 4.34-4.35). As in the historical *lilong* model, the south entrance is framed by a stone-gate to continue the shi-ku-men housing name reference and knowledge (Figure 4.42). All of these design features provide dwellers with an opportunity to

create social networks and communities with a variety of people from diversified backgrounds (age, gender, place of origin, dialect, occupation, and so on). Additionally, a Property Management Team can help manage and maintain the physical aspects of the property as well as help facilitate activities within the community to promote resource awareness and the formation of social networks and community building (Figure 4.49-4.56).

Overall, the design intention of the Contemporary *Lilong* style is to create the alleyways and exterior hallways in a comfortable and user-friendly manner. Because of the openness of the alleyways and exterior hallways, neighbors can easily carry conversations from one floor to the other. Occupants can easily smell what their neighbors are cooking and at times begin to taste the delicious meals, they can see other residents through their windows, and can hear the laughter and cries of children playing nearby along with the factory machinery churning a few doors down. Residents can hear their neighbors' conversations which may offer them useful information about different life issues or even hear the rather intimate squabbles of married couples. As a resident of the Contemporary *Lilong* community, one can also engage in practical activities such as call one's favorite restaurant and request for the delivery of a meal, especially when living on the seventh floor or when time is limited. As was the case in the historical model with peddlers and residents living on the top floors, when the delivery person arrives at the contemporary neighborhood, one can lead down a basket tied to a rope with money to pay for the meal. Then the food, which is secured in the basket by the delivery person, can be all the way up to the seventh floor, thus referencing old social *lilong* customs and obtaining a convenient meal, all without having to climb a single stair (Figure 4.11).

4.4 CONCLUSION

The general design intent behind the Contemporary *Lilong* model is to create community spaces which provide migrants with a sense of familiarity and allow for a continuum of communication, visibility, and connection and to offer its residents the potential to live, work, and play within their neighborhood. The Contemporary *Lilong* model is designed and customized for the migrant worker population in present-day Shanghai and aims to facilitate the integration of migrants into the city as well as help to improve their quality of life.

The proposed model is a new form of community housing typology that aimed to "abstract" and customize the *lilong* type concept specifically for the migrant worker population and their cultural traditions of networking to increase their likelihood of success in Shanghai. The model explores the innovative and strategic integration of several of the design concepts proposed: graduated privacy, benign panopticon, fluid space, accessibility to neighbors, affordability, variety of unit size, and walkability. This project does not propose to resolve the

current complex and multidisciplinary situation affecting millions of rural-urban migrant workers—it is merely the beginning of a conversation to start actively brainstorming for a sustainable solution to the migrant worker condition in Shanghai.

One of the most significant design challenges and potential limitation of the Contemporary *Lilong* design scheme and design concepts relates back to arguments of architectural determinism. Despite the vision and intent of the author illustrating the social character of the neighborhood, the user group may not use the spaces as they have been intended. Migrant worker residents may not want to interact with one another in the community spaces provided and may not want to take advantage of the resources, networking activities, and opportunities hosted by the Property Management Team—a team which may not be funded. Furthermore, as in the historical model, many residents may not develop a strong sense of community and only help each other due to circumstances, thus, significantly limiting the level of interaction and investment in one another. Additionally, the dwellers may not appreciate the high visibility system even when it can foster a greater sense of safety and intimacy and may not wish to interact with their neighbors and share their city knowledge.

The Contemporary *Lilong* social structure may be too restrictive and tight as was the historical *lilong* model for most residents. The close physical proximity and high visibility of neighbors may be a great challenge to those who do not wish to interact with their neighbors. As such, they may opt to live in a typical gated community where anonymity is the social norm with very few social expectations of interaction. However, as a reminder, because the migrant worker population is an extremely vulnerable group in substandard housing conditions and in great need for a community building with design concepts for building social networks and community. Thus, the Contemporary *Lilong* model and the design concepts are specifically created for the rural-urban migrant worker population new to Shanghai. They represent an abstract way of thinking in a housing model that not only facilitates the integration of migrants into the city but also helps improve the quality of life for them. In this case, visibility and close physical proximity to one's neighbors may prove instrumental in migrants' transition processes into Shanghai. As such, the Contemporary *Lilong* housing typology is only intended to address the particular housing and networking needs of new rural-urban migrant workers in present-day Shanghai, and not the needs of every single social group in Shanghai—this is a specialized model for a particular group.

Moreover, social sustainability is an additional concern and it is possible that diverse types of residents will not be attracted to this housing model. Potentially, the larger housing units will not be occupied by more affluent workers and may be subdivided instead and be leased to several workers of the same income range as those in the smaller housing unit sizes. As such, the neighborhood can become characterized as a low-income area, thus, exacerbating further the disparity between livelihoods, access to resources, and resulting likelihood for success between

the different social economic groups in Shanghai. Furthermore, the Contemporary *Lilong* design scheme is not significantly dense and does not provide the developer with the maximum rental units available such as the typical high-rise, high-density housing tower in apartment blocks in Shanghai and other highly populated cities. At the time of completion, the model may also not be affordable to the average rural-urban migrant worker in present-day Shanghai. Additional challenges exist and these include that of delivery and ensuring that the people who are the intended user group are the ones that lease the proposed units. Overall, the issues related to the rural-urban migrant worker population are incredibly complex and influenced by many factors such as those related to the political, socio-economic, and cultural elements. However, as stated above, this project is intended to function as a stepping stone towards a dialogue where we start to actively consider a sustainable solution to the migrant worker population situation in present-day Shanghai.

Ultimately, this project will be instrumental to those who are interested in improving the housing conditions of migrant workers in Shanghai in a way that prioritizes and promotes the formation of social networks. This project will also prove useful to those who are invested in continuing the transformation of the *lilong* model and the overall architectural language of the city of Shanghai. What this author offers is a way of abstract thinking and designing which can begin to resolve several of the social, historical, and architectural challenges faced by migrant workers, local governments, professionals, scholars, and local residents in Shanghai. Furthermore, the design concepts identified will be instrumental to those who aspire to create community buildings that prioritize social networking features not only in the context of Shanghai but also abroad. Community building practices are not a uniquely Chinese phenomenon—they are universal practices that have taken shape throughout the world. As such, the customized and responsive strategic application of the proposed design concepts to place, time, culture, and who we are may be widely applicable.[615]

615 Long, “Paul T. Frankl’s Pacific Modernism.”

APPENDIX A

FIGURES

Figure 1.1: China's internal migration patterns[1]

1 Ulrike Bronner and Clarissa Reikersdorfer, eds., *Urban Nomads Building Shanghai: Migrant Workers and the Construction Process* (Bielefeld: Transcript-Verlag, 2016), 36.

Figure 1.2: The number of migrant workers in various years[2]

2 Bronner and Reikersdorfer, 81.

Figure 1.3: Distribution of rural migrant workers by educational attainment, 2010[3]

3 Bronner and Reikersdorfer, 85.

Figure 1.4: Main industries of migrant workers, 2007 and 2014[4]

4 Bronner and Reikersdorfer, 86.

Figure 1.5: Monthly minimum wage levels (yuan) in selected cities and provinces (October 2017)[5]

5 China Labour Bulletin, “Labour Relations FAQ,” China Labour Bulletin, 2018, http://www.clb.org.hk/content/labour-relations-faq.

Figure 1.6: Several documented urban villages in (a) Shanghai, (b) Beijing, and (c) Guangzhou, 2010[6]

6 Fulong Wu, Fangzhu Zhang, and Chris Webster, eds., *Rural Migrants in Urban China: Enclaves and Transient Urbanism* (Florence: Routledge, 2015), 130.

Figure 1.7: Typical stages of urban village development[7]

7 Stefan Al, ed., *Villages in the City: A Guide to South China's Informal Settlements*, Bilingual edition (Hong Kong : Honolulu: University of Hawaii Press, 2014), 66–67.

Figure 1.8: An example of "kissing buildings" in Shipai Village in Guangzhou[8]

8 Al, 130–31.

Figure 1.9: A group of workers in the dorms relaxing after a long day of work[9]
Source: Marcin Szczepanski

9 Sarah Swider, *Building China: Informal Work and the New Precariat*, 1 edition (Ithaca: ILR Press, 2015), 46.

Figure 1.10: *Lilong* blocks intersected by the evolving cityscape in modern Shanghai[10]

10 Renee Y. Chow, *Changing Chinese Cities: The Potentials of Field Urbanism* (Honolulu: University of Hawaii Press, 2015), 65.

Figure 1.11: One of the few remaining *Shikumen Lilong* housing communities[11]

11 Peter G. Rowe and Kuan, eds., *Shanghai: Architecture and Urbanism for Modern China* (Munich ; New York: Prestel Publishing, 2004), 65.

Figure 1.12: The typical structural pattern of a *lilong* neighborhood: "fish-bone"[12]
Source: Wenjun Ge

12 Non Arkaraprasertkul, “Towards Modern Urban Housing: Redefining Shanghai’s Lilong,” *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 2, no. 1 (March 1, 2009): 14.

Figure 1.13: An old woman running a petty gambling game while watching her grandson[13]
Source: The Shanghai Museum

13 Hanchao Lu, *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century*, New Ed edition (Berkeley: University of California Press, 2004), 216.

Figure 1.14: A portable library enjoyed by children and adults[14]
Source: R. Barz, Shanghai: Sketches of Present-Day Shanghai

14 Lu, 213.

Figure 1.15: A typical barber who could be found almost everywhere Shanghai in the early 1930's[15]
Source: R. Barz, *Shanghai: Sketches of Present-Day Shanghai*

15 Lu, 211.

Figure 1.16: A tinker mending bamboo baskets in an alleyway[16]
Source: The Shanghai Museum

16 Lu, 214.

Figure 1.17: Sketches from Feng Zikai capturing the *lilong*-alley life[17]
Source: Feng Zikai, *Feng Zikai wenji*

17 Lu, 208.

Figure 1.18: A housing unit left standing in an almost razed *lilong* neighborhood in modern time[18]

18 Non Arkaraprasertkul and Matthew Williams, “The Death and Life of Shanghai’s Alleyway Houses–Re-Thinking Community and Historic Preservation,” *Review of Culture* 50 (2015): 145.

Figure 1.19: *Lilong* housing units being demolished[19]
Source: Zheng Xianzhang

19 Ruan Yisan et al., *Shanghai Shikumen* (Shanghai: Shanghai People's Fine Arts Publishing House, 2011), 158.

Figure 1.20: *Shikumen* planning and removal[20]
Source: Zheng Xianzhang

20 Yisan et al., 156–57.

Figure 2.1: *Lilong* blocks intersected by the evolving cityscape in modern Shanghai[21]

21 Chow, *Changing Chinese Cities*, 65.

Figure 2.2: The area where Suzhou (Soochow) Creek connects with Huangpu (Wong Poo) River in 1937, which hints of *lilong* housing that can be seen on the south side (left-hand side of figure) of Suzhou Creek[22]
Source: Shanghai Municipal Archive

22 Lu, *Beyond the Neon Lights*, 42.

Figure 2.3: The growth of Shanghai, 1846-1914[23]

23 Lu, 30.

Figure 2.4: One of the few remaining *Shikumen Lilong* housing communities[24]

24 Rowe and Kuan, *Shanghai*, 65.

Figure 2.5: The basic and typical layout of a *lilong* compound[25]

25 Lu, *Beyond the Neon Lights*, 244.

Figure 2.6: The typical structural pattern of a *lilong* neighborhood: "fish-bone"[26]
Source: Wenjun Ge

26 Arkaraprasertkul, “Towards Modern Urban Housing,” 14.

Figure 2.7: A Late-Period *Lilong* style (single-bay) residence: (A) branch alley; (B) stone-arch-gate (*shi-ku-men*); (C) courtyard (patio); (D) reception room; (E) stairs; (F) service area; (G) side rooms[27]

27 Chow, *Changing Chinese Cities*, 55.

Figure 2.8: Master plan of a *lilong* neighborhood
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 57.

Figure 2.9: A cross section drawing of a *lilong* neighborhood. The residence is entered from the branch alleyway on the south side (marked with an arrow) and is marked by a stone-gate (*shi-ku-men*). The highlighted portions indicate the space of one house.
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 58.

Figure 2.10: An old woman running a petty gambling game while watching her grandson[28]
Source: The Shanghai Museum

28 Lu, *Beyond the Neon Lights*, 216.

Figure 2.11: A portable library enjoyed by children and adults[29]
Source: R. Barz, *Shanghai: Sketches of Present-Day Shanghai*

29 Lu, 213.

Figure 2.12: A typical barber who could be found almost everywhere Shanghai in the early 1930's[30]
Source: R. Barz, *Shanghai: Sketches of Present-Day Shanghai*

30 Lu, 211.

Figure 2.13: A tinker mending bamboo baskets in an alleyway[31]
Source: The Shanghai Museum

31 Lu, 214.

Figure 2.14: Sketches from Feng Zikai capturing the *lilong*-alley life[32]
Source: Feng Zikai, *Feng Zikai wenji*

32 Lu, 208.

Figure 2.15: Appropriation of a *lilong* branch alleyway[33]

33 Greg Guldin and Aidan Southall, *Urban Anthropology in China*, vol. 6 (Leiden: Brill, 1993), 408, https://brill.com/view/title/2252.

Figure 2.16: The interior of a *lilong* neighborhood in modern times illustrating the general sentiment of typical alleyway during the early 1900's [34]

34 Chow, *Changing Chinese Cities*, 50.

Figure 2.17: The interior of a *lilong* neighborhood in modern times illustrating the general sentiment of typical alleyway during the early 1900's [35]

35 Arkaraprasertkul and Williams, “The Death and Life of Shanghai’s Alleyway Houses–Re-Thinking Community and Historic Preservation,” 142.

Figure 2.18: The interior of a *lilong* neighborhood in modern times illustrating the general sentiment of typical alleyway during the early 1900's [36]
Source: Zheng Xianzhang

36 Yisan et al., *Shanghai Shikumen*, 89.

Figure 2.19: The interior of a *lilong* neighborhood in modern times illustrating the general sentiment of typical alleyway during the early 1900's [37]
Source: Zheng Xianzhang

37 Yisan et al., 126.

Figure 2.20: Floor plans for three *lilong* houses: (A) "multi-bay," U-shaped shikumen house built in 1872 in Xingren Li (Alley of Prosperity and Benevolence); (B) "two-bay, one wing" shikumen house built in 1924 in Huile Li (Alley of Joint Pleasure); (C) "single-bay" shikumen house built in 1930 in Jianye Li (Alley of Establishing Careers)[38]

38 Lu, *Beyond the Neon Lights*, 148.

Figure 3.1: A Late-Period *Lilong* style (single-bay) residence: (A) branch alley; (B) stone-arch-gate (*shi-ku-men*); (C) courtyard (patio); (D) reception room; (E) stairs; (F) service area; (G) side rooms[39]

39 Chow, *Changing Chinese Cities*, 55.

Figure 3.2: One of the many uniquely designed *shi-ku-mens*[40]
Source: Zheng Xianzhang

40 Yisan et al., *Shanghai Shikumen*, 29.

Figure 3.3: One of the many uniquely designed *shi-ku-mens*[41]
Source: Zheng Xianzhang

41 Yisan et al., 7.

Figure 3.4: Plan of *lilong* neighborhood illustrating examples of the *shi-ku-men* use at the neighborhood and housing-unit scale.
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Lu, *Beyond the Neon Lights*, p.178 & p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 3.5: The typical alleyway layout in a *lilong* compound[42]

42 Lu, *Beyond the Neon Lights*, 244.

Figure 3.6: Master plan of a *lilong* neighborhood illustrating the two types of alleys
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 57.

Figure 3.7: Jianye Li (Alley of Establishing Careers) had several main alleyways, about 16.5 feet wide (5 meters), to service the 187,000 square-foot *lilong* compound, which accommodated 260 residential units (built in 1930)[43]
Source: Shanghai Municipal Archive

43 Lu, 183.

Figure 3.8: A *lilong* neighborhood plan illustrating the variety of shops and services generally available in the community
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57.; Lu, *Beyond the Neon Lights*, p.178 & p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*), p.211 & p.213 (photographs from R. Barz, *Shanghai Sketches of Present-Day Shanghai*), p.214 & p.216 (photographs from the Shanghai Museum), p.201 (photograph from the Shanghai Municipal Library); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 3.9: *Lilong* residents relaxing and connecting with their neighbors[44]
Source: Zheng Xianzhang

44 Yisan et al., *Shanghai Shikumen*, 87.

Figure 3.10: A plan of a *lilong* neighborhood illustrating the multi-function character of the alleyways
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 3.11: The concept of "graduated privacy" within a *lilong* neighborhood[45]

45 Gregory Bracken, *The Shanghai Alleyway House: A Vanishing Urban Vernacular*, 1 edition (Routledge, 2013), 4.

Figure 3.12: An old woman watching her grandson while running a petty gambling game[46]
Source: The Shanghai Museum

46 Lu, *Beyond the Neon Lights*, 216.

Figure 3.13: Enjoying a portable library with friends[47]
Source: R. Barz, *Shanghai: Sketches of Present-Day Shanghai*

47 Lu, 213.

Figure 3.14: Bystanders watching chess or card players in a teahouse[48]

48 Hanchao Lu, “Away from Nanking Road: Small Stores and Neighborhood Life in Modern Shanghai,” *The Journal of Asian Studies* 54, no. 1 (1995): 10, https://doi.org/10.2307/2058952.

Figure 3.15: Getting a quick hair cut in one of the alleyways[49]
Source: R. Barz, *Shanghai: Sketches of Present-Day Shanghai*

49 Lu, *Beyond the Neon Lights*, 211.

Figure 3.16: The *lilong*-alley life as captured in the sketches of Feng Zikai[50]
Source: Feng Zikai, *Feng Zikai wenji*

50 Lu, 208.

Figure 3.17: *Lilong* residents greeting neighbors[51]
Source: Zheng Xianzhang

51 Yisan et al., *Shanghai Shikumen*, 71.

Figure 3.18: A *lilong* neighborhood in modern times embodying the general sentiment of typical alleyway during the early 1900's[52]
Source: Zheng Xianzhang

52 Yisan et al., 126.

Figure 3.19: A *lilong* neighborhood in modern times embodying the general sentiment of typical alleyway during the early 1900's[53]
Source: Zheng Xianzhang

53 Arkaraprasertkul and Williams, “The Death and Life of Shanghai’s Alleyway Houses–Re-Thinking Community and Historic Preservation,” 142.

Figure 3.20: The interior of a *lilong* neighborhood in modern times illustrating the general sentiment of typical alleyway during the early 1900's[54]
Source: Zheng Xianzhang

54 Yisan et al., *Shanghai Shikumen*, 89.

Figure 3.21: Two women doing their daily chores in a branch alleyway[55]

55 Guldin and Southall, *Urban Anthropology in China*, 6:408.

Figure 3.22: Enjoying life in a *lilong* neighborhood[56]
Source: Zheng Xianzhang

56 Yisan et al., *Shanghai Shikumen*, 55.

Figure 3.23: Enjoying life in a *lilong* neighborhood[57]
Source: Zheng Xianzhang

57 Yisan et al., 33.

Figure 3.24: People watching[58]
Source: Zheng Xianzhang

58 Yisan et al., 132.

Figure 3.25: Children playing in a *lilong* neighborhood[59]
Source: Zheng Xianzhang

59 Yisan et al., 132.

Figure 3.26: Enjoying life in a lilong neighborhood[60]
Source: Zheng Xianzhang

60 Yisan et al., 24.

Figure 3.27: The general *lilong* compound layout documenting the shop-houses ("house without courtyard") at the periphery of the neighborhood[61]

61 Lu, *Beyond the Neon Lights*, 244.

Figure 3.28: The general floor plan for a shop-house in a lilong neighborhood which allowed easy access from the street into the living room[62]

62 Lu, 245.

Figure 3.29: Plan of *lilong* neighborhood. The highlighted section corresponds with the documented plan area in various diagrams.
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 57.

Figure 3.30: Residence and shop-house layout in a partial *lilong* neighborhood plan
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 60-61.

Figure 3.31: Partial plan of a *lilong* neighborhood showing the main and branch alleyways
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 60-61.

Figure 3.32: *Lilong* neighborhood plan illustrating its mixed-zone character.
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.60-61; Lu, *Beyond the Neon Lights*, p.178 & p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*), p.211 & p.213 (photographs from R. Barz, *Shanghai Sketches of Present-Day Shanghai*), p.214 & p.216 (photographs from the Shanghai Museum), p.201 (photograph from the Shanghai Municipal Library); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 3.33: Partial *lilong* plan illustrating the blurring of semi-private and private spaces along branch alleyways
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.60-61; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang); Arkaraprasertkul & Williams, *The Death and Life of Shanghai's Alleyway Houses*, p.142.

Figure 3.34: A cross section drawing of a *lilong* neighborhood. The residence is entered from the branch alleyway on the south side (marked with an arrow) and is marked by a stone-gate (*shi-ku-men*). The highlighted portions indicate the space of one house
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 58.

Figure 3.35: A cross section drawing of a *lilong* neighborhood. Each housing unit was subdivided to accommodate a number of households. The majority of families entered from the service entry on the north side (indicated by larger arrow) because it provided direct access the stairway which led to almost all of the bedrooms. The highlighted portions indicate the space of one household within each residence
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 58.

Figure 3.36: Shop-houses at the periphery of alleyway house compound[63]

63 Bracken, *The Shanghai Alleyway House*, 93.

Figure 3.37: Sectional diagram of the shop-houses at the periphery of a *lilong* compound[64]

64 Non Arkaraprasertkul, “Resilient Lilong: An Ethnography of Shanghai’s Urban Housing,” *Retrieved September* 3 (2009): 15.

Figure 4.1: Residence and shop-house layout in a *lilong* neighborhood master plan
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 57.

Figure 4.2: Main and branch alleyways a *lilong* master plan
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 57.

Figure 4.3: Plan of *lilong* neighborhood illustrating examples of the *shi-ku-men* use at the neighborhood and housing-unit scale
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Lu, *Beyond the Neon Lights*, p.178 & p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 4.4: Plan of *lilong* neighborhood. The highlighted section corresponds with the documented plan area in various diagrams
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 57.

Figure 4.5: Residence and shop-house layout in a partial *lilong* neighborhood plan
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 60-61.

Figure 4.6: Partial plan of a *lilong* neighborhood showing the main and branch alleyways
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cities*, 60-61.

Figure 4.1: *Lilong* neighborhood plan illustrating its mixed-zone character
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.60-61.; Lu, *Beyond the Neon Lights*, p.178 & p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*), p.211 & p.213 (photographs from R. Barz, *Shanghai Sketches of Present-Day Shanghai*), p.214 & p.216 (photographs from the Shanghai Museum), p.201 (photograph from the Shanghai Municipal Library); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 4.8: Building communities through a shared sense of safety and intimacy
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 4.9: Plan of a *lilong* neighborhood illustrating people socializing
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 4.10: Enjoying the coolness[1]
Source: Zheng Xianzhang

1 Ruan Yisan et al., *Shanghai Shikumen* (Shanghai: Shanghai People's Fine Arts Publishing House, 2011), 87.

Figure 4.11: Sketches from Feng Zikai capturing the *lilong*-alley life[2]
Source: Feng Zikai, *Feng Zikai wenji*

2 Hanchao Lu, *Beyond the Neon Lights: Everyday Shanghai in the Early Twentieth Century*, New Ed edition (Berkeley: University of California Press, 2004), 208.

Figure 4.12: Plan illustrating commercial activity in a *lilong* neighborhood
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.57; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang); Lu, *Away from Nanking Road*, p.107 & p.114.

Figure 4.13: Partial *lilong* plan illustrating the blurring of semi-private and private spaces along branch alleyways
Source: Diagram created by author. Diagram content source(s): Chao, *Changing Cites,* p.60-61; Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang); Arkaraprasertkul & Williams, *The Death and Life of Shanghai's Alleyway Houses*, p.142.

Figure 4.14: The terraces of several *lilong* dwellings that serve to illustrate the physical proximity of each unit[3]
Source: Zheng Xianzhang

3 Yisan et al., *Shanghai Shikumen*, 47.

Figure 4.15: A Late-Period *Lilong* style (single-bay) residence: (A) branch alley; (B) stone-arch-gate (*shi-ku-men*); (C) courtyard (patio); (D) reception room; (E) stairs; (F) service area; (G) side rooms[4]

4 Renee Y. Chow, *Changing Chinese Cities: The Potentials of Field Urbanism* (Honolulu: University of Hawaii Press, 2015), 55.

Figure 4.16: A cross section drawing of a *lilong* neighborhood. The residence is entered from the branch alleyway on the south side (marked with an arrow) and is marked by a stone-gate (*shi-ku-men*). The highlighted portions indicate the space of one house
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 58.

Figure 4.17: A cross section drawing of a *lilong* neighborhood. Each housing unit was subdivided to accommodate a number of households. The majority of families entered from the service entry on the north side (indicated by larger arrow) because it provided direct access the stairway which led to almost all of the bedrooms. The highlighted portions indicate the space of one household within each residence
Source: Diagram created by author. Diagram content source: Chao, *Changing Cities,* 58.

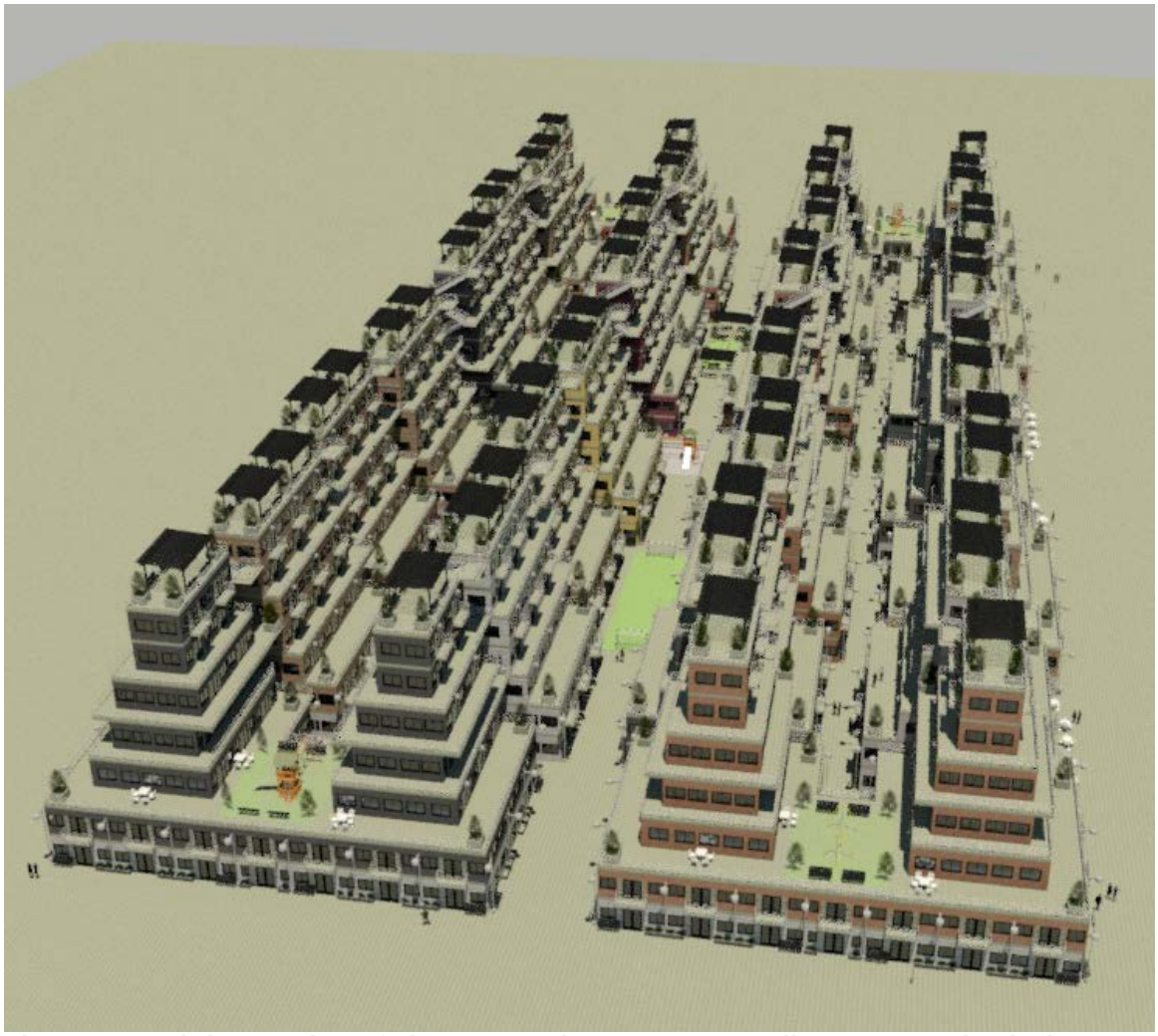

Figure 4.18: Bird's eye view of the proposed Contemporary *Lilong* community design

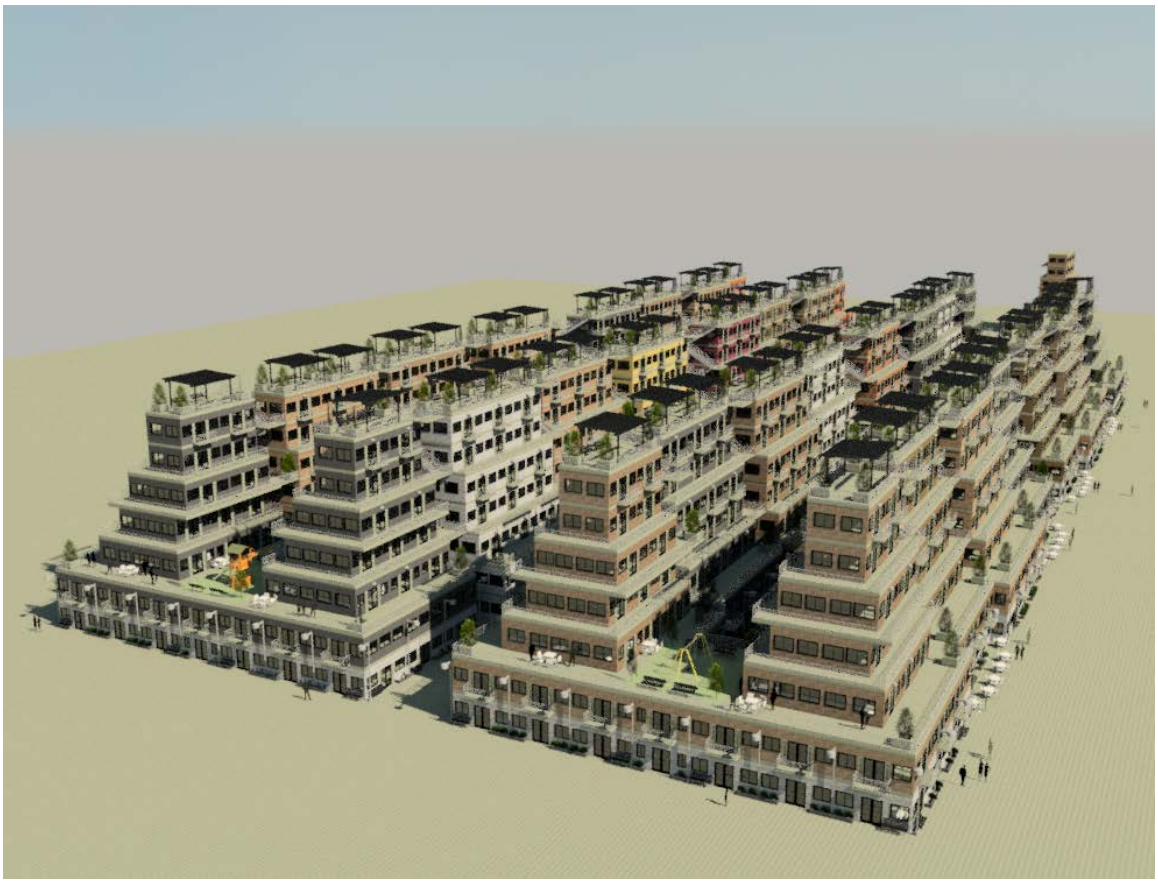

Figure 4.19: Bird's eye view of the proposed Contemporary *Lilong* community design

Figure 4.20: Bird's eye view of the proposed Contemporary *Lilong* community design

Figure 4.21: Southern view of the proposed Contemporary *Lilong* community design illustrating one of the main alleyways traversing the compound from south to north

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Figure 4.23: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Ground Floor)

Figure 4.24: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Second Floor)

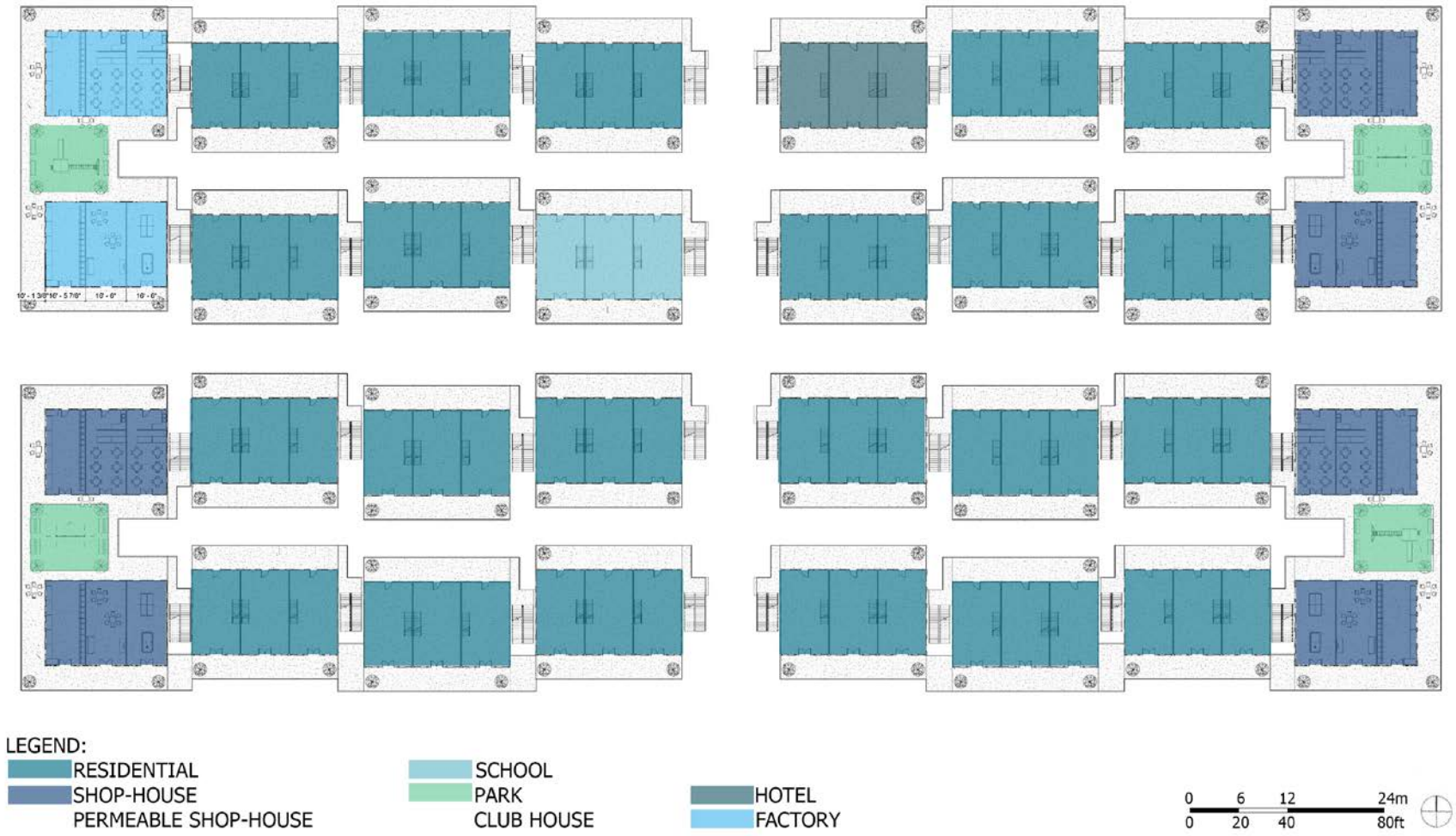

Figure 4.25: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Third Floor)

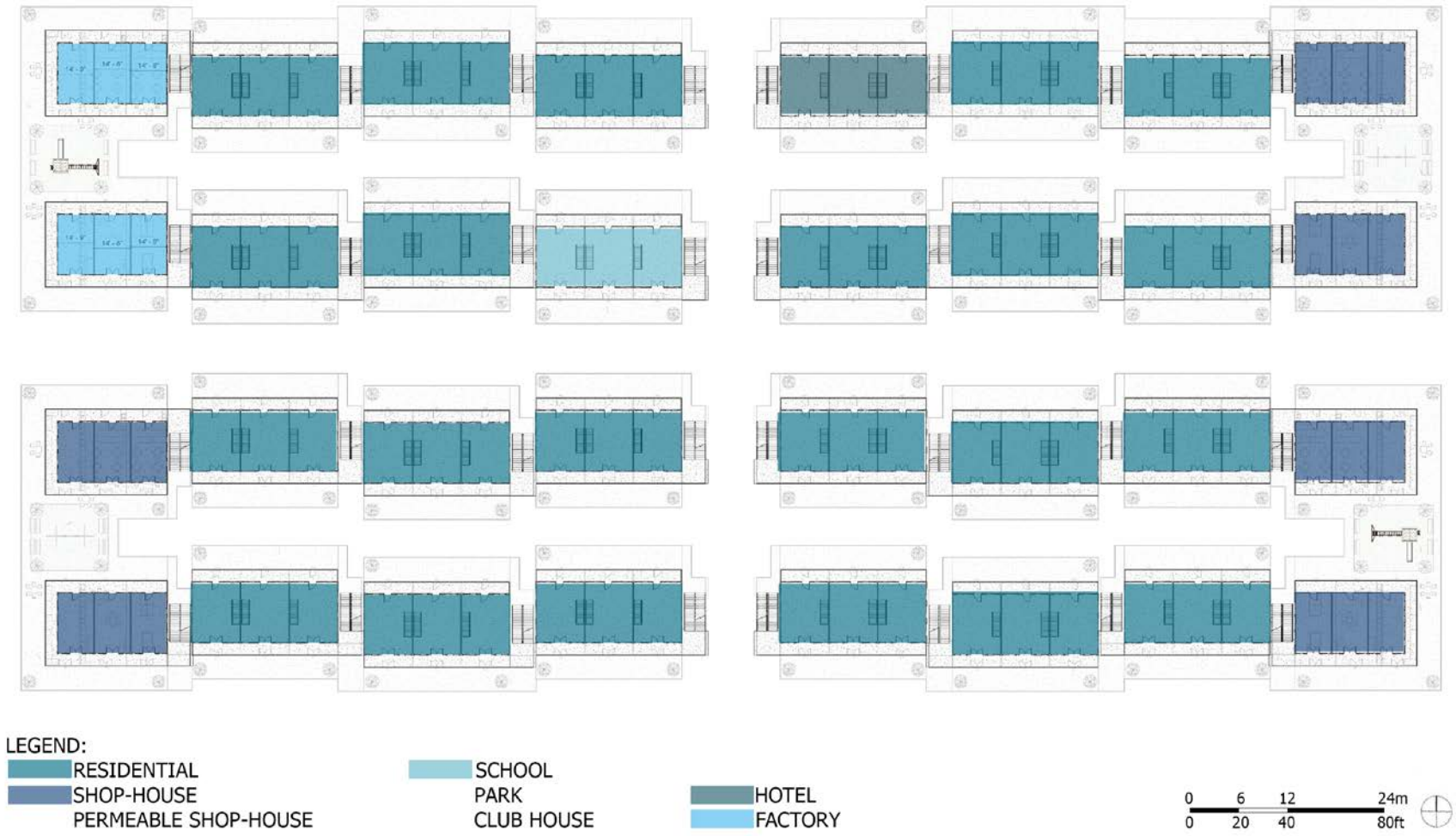

Figure 4.26: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Fourth Floor)

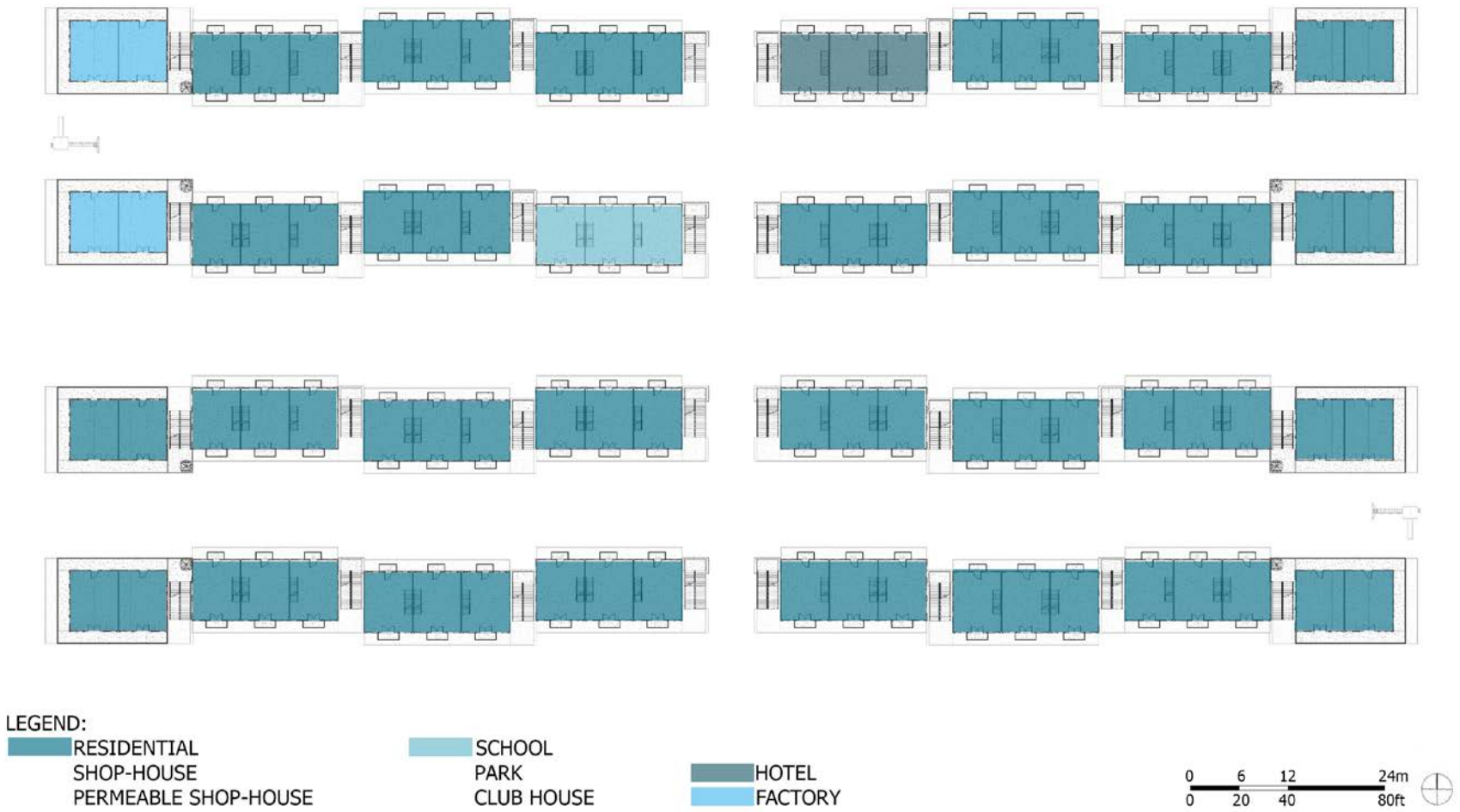

Figure 4.27: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Fifth Floor)

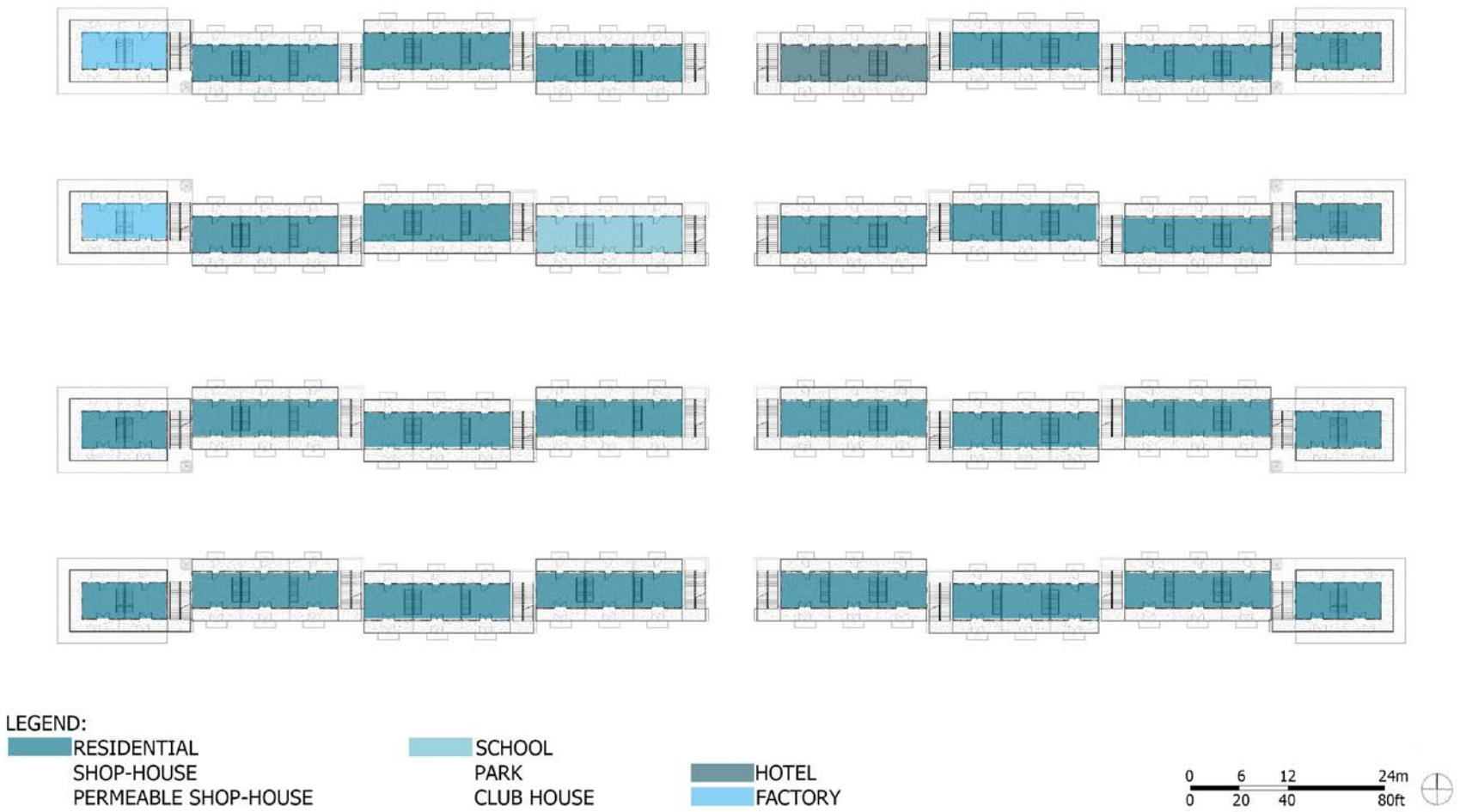

Figure 4.28: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Sixth Floor)

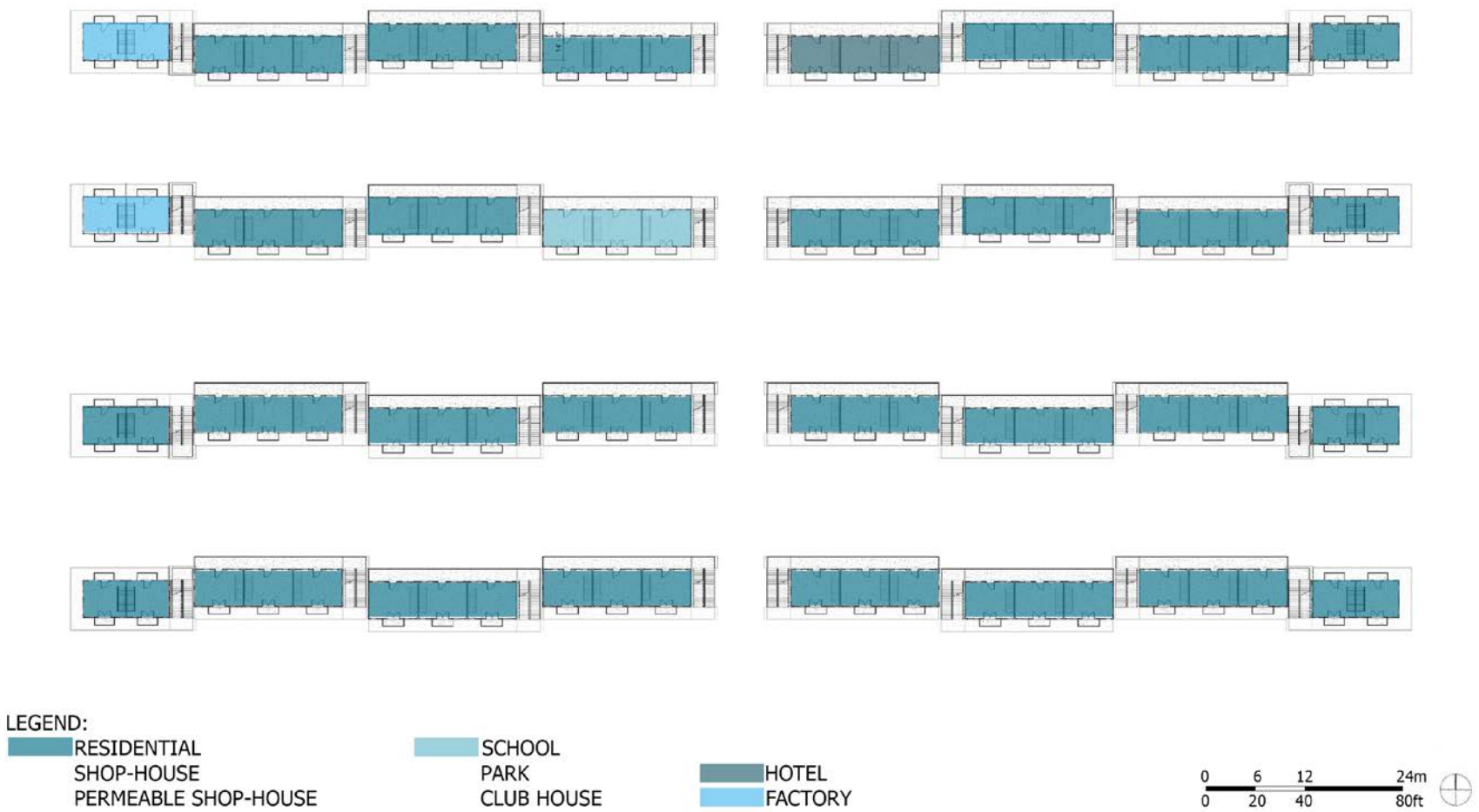

Figure 4.29: Master plan for the proposed Contemporary *Lilong* design scheme: Mixed-use character (Seventh Floor)

Figure 4.30: Exterior of neighborhood showcasing the light-gray brick color of the shop-house

Figure 4.31: A branch alleyway showcasing the light-gray brick color of the shop-house on the left side and directly ahead

Figure 4.32: Active outdoor seating area created through the circuitous *shikumen* layout

Figure 4.33: A branch alleyway showcasing the semi-semi-private niches created with the circuitous tower layout

Figure 4.34: A branch alleyway showcasing the niches created with the circuitous tower layout

Figure 4.35: A branch alleyway showcasing the semi-semi-private niches created with the circuitous tower layout

Figure 4.36: A main alleyway that captures the gradations in alley width due to the circuitous tower layout

Figure 4.37: A playground within a main alleyway that maximizes the gradations in alley width due to the circuitous tower layout

Figure 4.38: The view of a branch alleyway from the third floor, and over a permeable shop-house, that captures the niches created with the circuitous tower layout

West- and east-facing building type

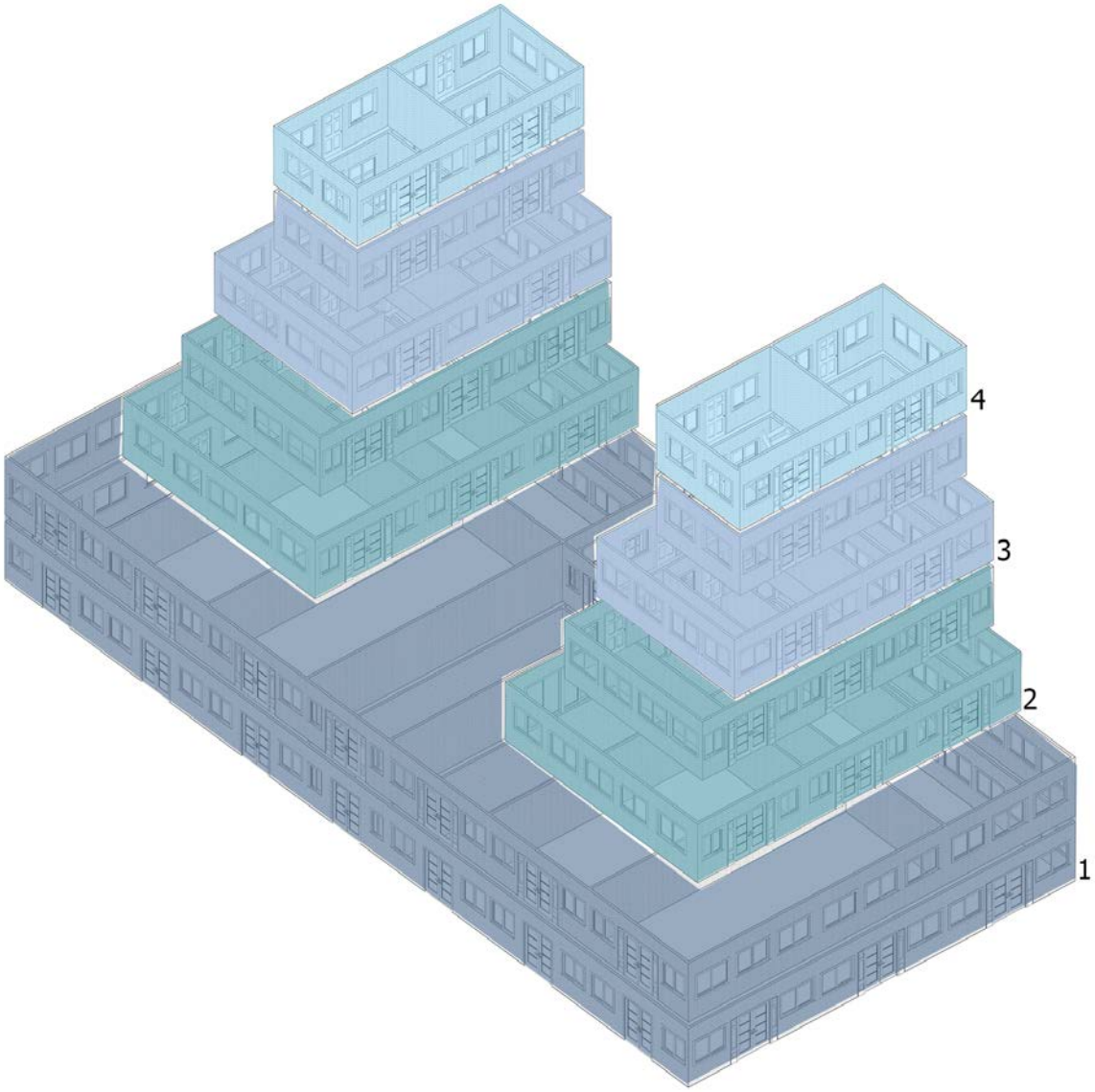

Figure 4.39: West- and east-facing tower. Building type is only used on the periphery of the compound. The highlighted portions indicate the four general unit types within each building typology

Single-building prototype

North- and south-facing building type

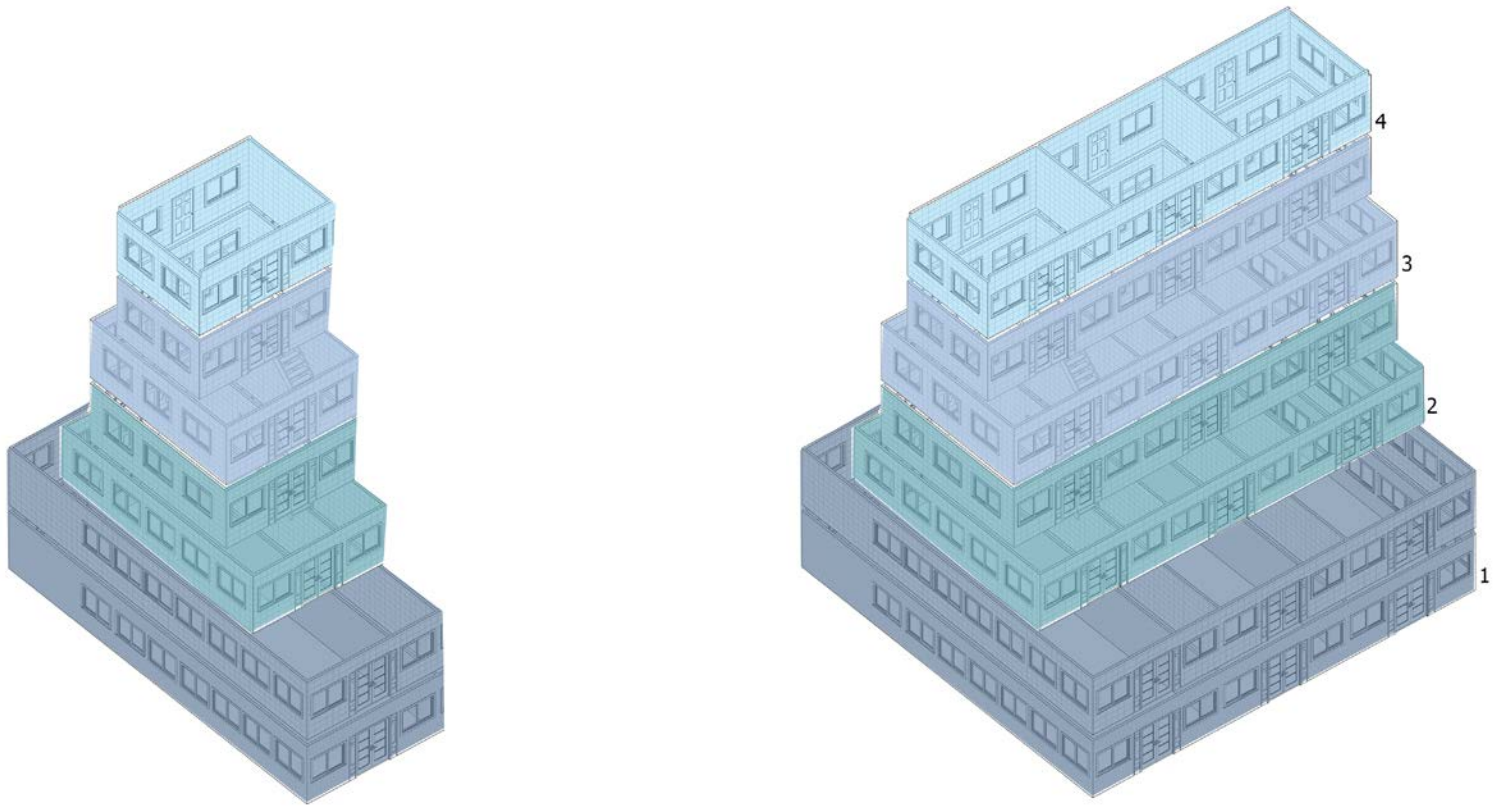

Figure 4.40: North- and South-facing tower is made up of a building prototype that is then replicated three times, to make one north- and south-facing tower. This building is used on the periphery of the compound and in the interior. The highlighted portions indicate the four general unit types within each building typology

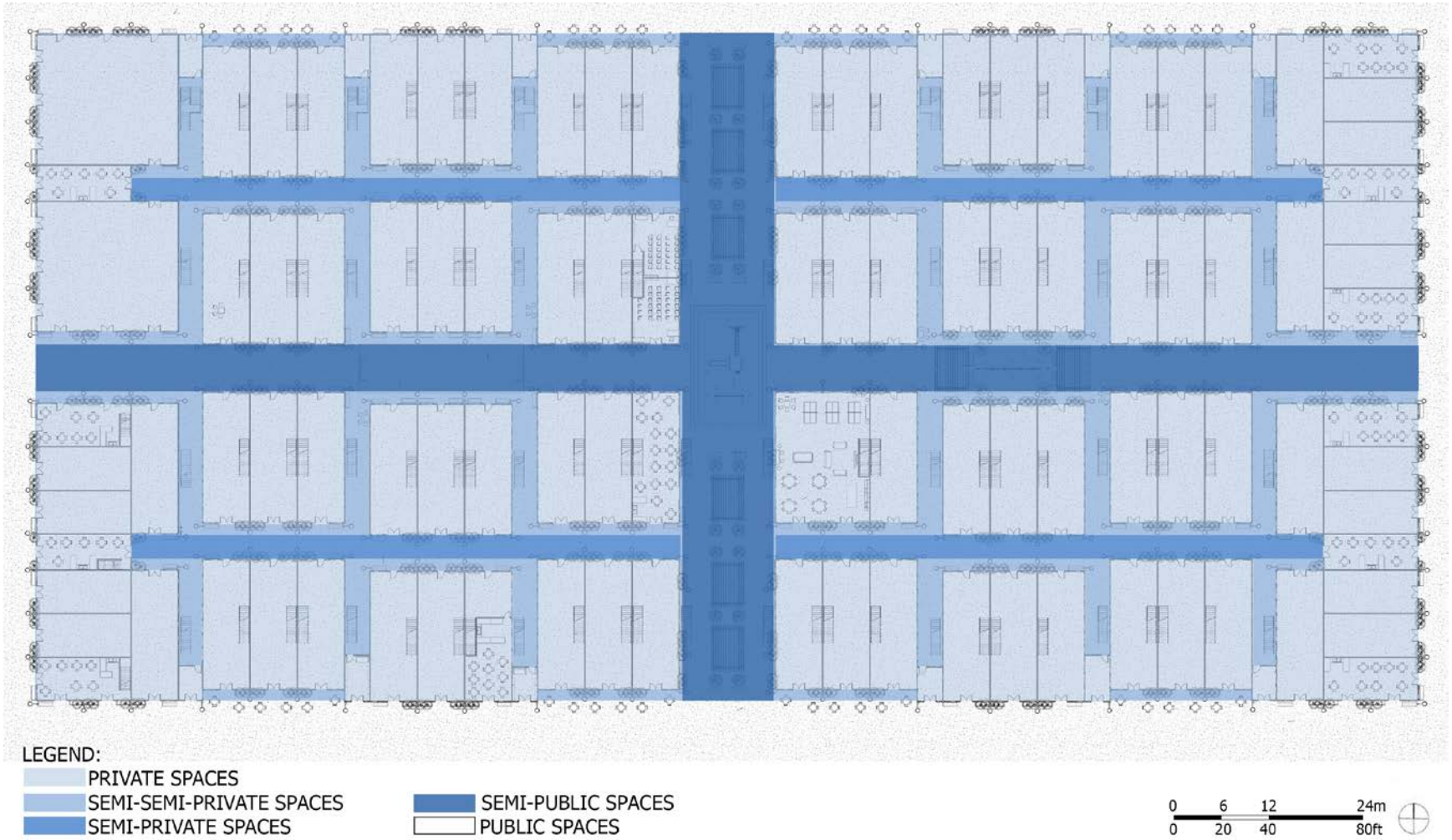

Figure 4.41: Master plan for the proposed Contemporary *Lilong* design scheme: Graduated privacy diagram

Figure 4.42: A plan of a Contemporary *Lilong* neighborhood describing the idea for the *shi-ku-men* use and design, at the neighborhood and housing-unit scale, which references directly the historical *shi-ku-men* design intention
Source: Diagram created by author. Diagram content source(s): Lu, *Beyond the Neon Lights*, p.190 (photographs from author), p.147 (photograph from Luo Xiaowei and Wu Jiang, comps., *Shanghai longtang*); Yisan, *Shanghai Shikumen*, (photographs from Zheng Xianzhang).

Figure 4.43: Exterior of compound showcasing the seamless design of the permeable shop-house

Figure 4.44: The entrance to a permeable shop-house from a branch alley

Figure 4.45: A permeable shop-house library

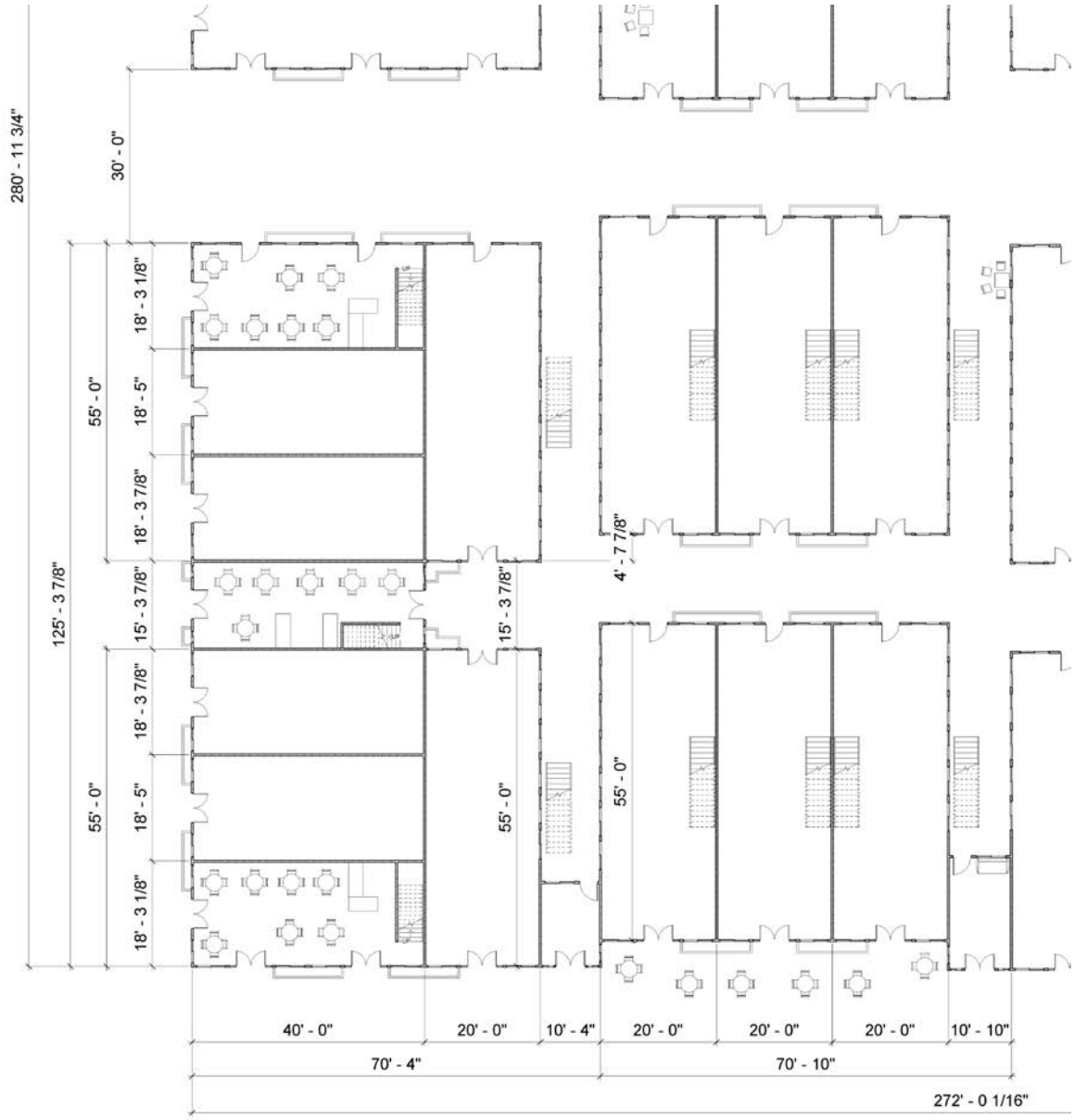

Figure 4.46: Unit dimensions: Ground Floor

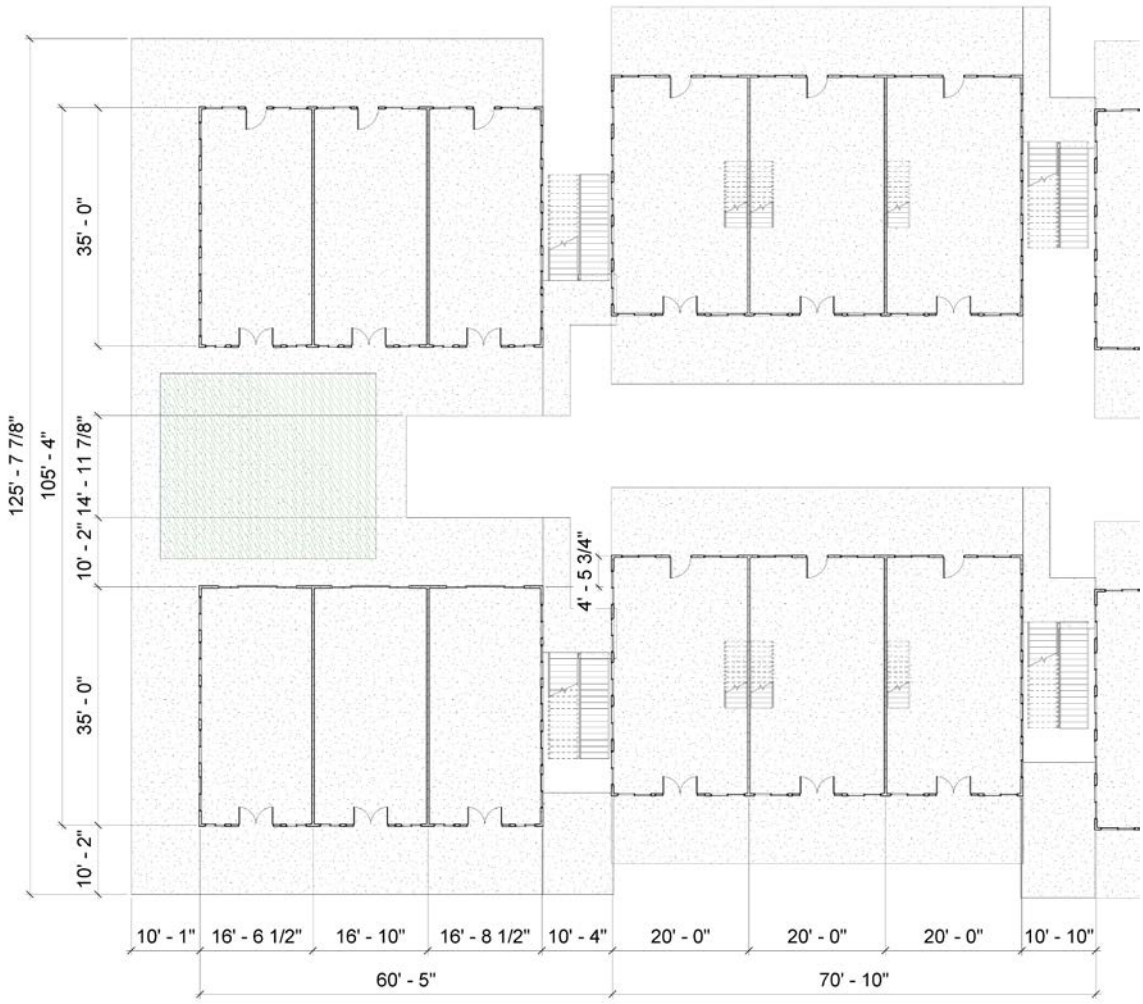

Figure 4.47: Unit dimensions: Third Floor

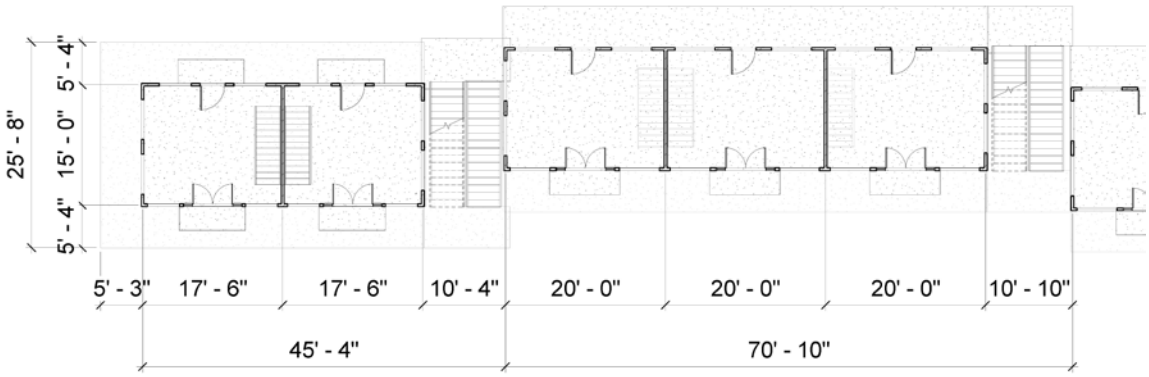

Figure 4.48: Unit dimensions: Seventh Floor

Figure 4.49: A plan of a Contemporary *Lilong* neighborhood indicating some of the numerous opportunities to network

Figure 4.50: Seating area in a main alleyway next to the Club House on its right side

Figure 4.51: The largest playground in the community with the Club House behind it

Figure 4.52: One of the many seating areas in the main alleyways

Figure 4.53: A miniature soccer field in a main alleyway surrounded by benches for viewers

Figure 4.54: The interior of the Club House

Figure 4.55: View towards the alley-school (yellow brick building) from the roof garden on the eighth floor

Figure 4.56: Roof garden character

APPENDIX B

TABLES

Table 1.1: Design features for some of the different *lilong* styles

	Shikumen Lilong* / Early-Period *Lilong	***New Shikumen Lilong*/ Late-Period *Lilong***	**New-Type *Lilong***	**Garden *Lilong***	**Apartment *Lilong***
		GROUND FLOOR	GROUND FLOOR	GROUND FLOOR	
	1870-1910	1910-1930	1910-1940	1920's	1950's
Residents	Working class	Working class		Upper class	
Lanes Width	3m		5-6m		
Width of Bays	3.6-4.2m 16m deep	3.2-3.9m 14m deep			
Height (stories)	2	2-3	3	3	
Corridor	1.2-1.5m	1.2-1.5m			
Plan	1-3 jian one-three bays	1jain single-bay	1-2 jian	2 jian	
Elevation	2 shangs				
Fenestration	-High perimeter wall with few fenestration -Daylight from courtyard -Ventilate through large screen French Windows	-Increased Fenestration at exterior walls	-Abandon of the exterior enclosure walls		

Table 1.1: Design features for some of the different *lilong* styles, continued.

	Shikumen Lilong* / Early-Period *Lilong	***New Shikumen Lilong*/ Late-Period *Lilong***	**New-Type *Lilong***	**Garden *Lilong***	**Apartment *Lilong***
		GROUND FLOOR	GROUND FLOOR	GROUND FLOOR	
Structure	-Wood frame -Brick bearing walls	-Concrete-framed structure, brick-wall as partitions and wood-truss roof system			
Amenities Changes	-Courtyard -No private restroom, electricity, heating & gas -Stone as door frame	-Reduced size courtyard -Stone as door frame	-Bathroom -Modern appliances -Telephone -Garages -Traditional details like brick carvings and meticulous decoration were replaced by simple western ornamentation		

Source: Table created by author. Table content source: Tam, Yan, and Li, *Reconsidering Authenticity*, 11-12.

Table 3.1: Residents in Zhengming Li, Shanghai, 1933-1951.

House Number	*Family Name*	*Occupation of Male Head of Household**	*Move-in Date*	*Place of Origin*
2	**You	Lilong compound guide	1933	Ningbo (Z)
4	Lu	Photographer	1941	Shunde (G)
6	Wu	Proofreader	1938	Changzhou (J)
8	Zhu	Accountant	1935	Ningbo (Z)
	Deng	Trolleybus diver	1938	Wuxi (J)
10	**Zhao	Unknown	1939	Jinan (S)
	Han	Bus conductor	1945	Yangzhou (J)
12	Lu	Factory manager	1937	Jiangyin (J)
14	**Jiang	Factory manager	1937	Ningbo (Z)
16	Hong	Unknown	1946	Chaozhou (G)
18	Sun	Press editor	1946	Ningbo (Z)
	Shen	Supervisor of conductors	1947	Ningbo (Z)
20	Zhao	Lawyer	1936	Suzhou (J)
22	Xi	Cotton mill office worker	1935	Nanhui (SH)
24	Deng	Tram driver	1950	Ningbo (Z)
	**Zhao	Peddler	1951	Pudong (SH)
26	Sun	Office worker	1947	Shaoxing (Z)

Notes:
1. An asterisk (*) indicates that the column "occupation of male head of household" shows occupations before 1949.
2. All families were current residents of Zhengming Li at the time of investigation in August 1995.
3. Two asterisks (**) indicates the families who were not current residents of Zhengming Li at the time of investigation in August 1995.
4. Residents who moved into the compound after 1951 are not included.
5. Abbreviations: (Z) = Zhejiang, (G) = Guangdong, (J) = Jiangsu, (S) = Shandong, (SH) = Shanghai.

Source: Table created by author. Table content source: Lu, *Beyond the Neon Lights,* 223.

Table 3.2: Neighborhood Stores on Hart Road, 1940's.

Types of Neighborhood Stores Along* Lilong *Compound Entrances
Intersection of Bubbling Well Road
Entrance of lane 109
Towel store
Meat store
Soy-sauce store
Rice store
Blacksmith
**Wine shop
**Sesame-cake store
**Hot -water store (*laobuzao*)
**Sesame-cake store
Entrance of lane 81
*Pharmacy
**Rice store
*Plumber shop
*Butcher
Entrance of lane 63
**Grocery store (southern China products)
*Barber shop
Towel store
Entrance of lane 53
*Dentist
Fruit store
**Coal store
**Tobacco-paper store
Entrance of lane 43
*Taylor shop
*Coffin shop
*Bottle store
*Cotton store
Entrance of lane 33
*Rattan work and bamboo-ware shop

Table 3.3: Neighborhood Stores on Hart Road, 1940's, continued.

Types of Neighborhood Stores Along* Lilong *Compound Entrances, continued
**Tobacco-paper store
**Soy-sauce store
Entrance of lane 23
Barber shop
Intersection of Avenue Foch
Notes: 1. Residences and other buildings not used for businesses are omitted. 2. The lane numbers are the present day street numbers. 3. An asterisk (*) indicates stores that were open until the 1960's. 4. Two asterisks (**) indicates stores that were still open in the 1980's. 5. The length of the road between the two intersections was about 250 meters (273 yards).

Source: Table created by author. Table content source: Lu, *Away from Nanking Road,* 97.

Table 3.4: Subletting in Republican Shanghai.

	Time of Leasing		
	Before 1938	***1938-1945***	***1948***
Number of Tenant Households	**You	Lilong compound guide	1933
Number of Tenant Households Leasing as "third tenants"	Lu	Photographer	1941
Percentage of "third tenants"	Wu	Proofreader	1938
Notes: 1. Samples from an Early-1950's Survey.			

Source: Table created by author. Table content source: Lu, *Beyond the Neon Lights,* 163.

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